THE BUILDER

Incorporating

ARCHITECTURE & THE BRITISH ARCHITECT

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THIS WEEK'S NEWS

APPLICATIONS are being invited by Hampshire County Council from architects with specialised experience in the design and construction of schools. p. 491

THE WINNING DESIGNS in the competition for flats for the Dover Corporation are illustrated on p. 493

WAYS of saving land as well as labour and materials are shown in "Houses, 1953," the recently published handbook of the Ministry of Housing and Local Government, which is reviewed on p. 499

TWO-STOREY COTTAGE FLATS which are cheaper to build than a pair of similar sized Council houses are being exhibited by the Ministry of Housing and Local Government at the Midlands Ideal Home Exhibition. p. 501

A CLAIM for a general increase in wages of 9d. an hour is to be presented to employers in the building industry by the National Federation of Building Trades Operatives when they meet for the annual review of the industry's national agreement next January. p. 514

"EMPLOYERS to-day are no longer buying labour, they are selling employment, and this is the keynote of efficient personnel management," Mr. D. E. Woodbine Parish told a meeting of Builders' Foremen and Clerks of Works at Cambridge, recently. p. 515

PLANS have been finalised for the building of an entirely new town and port in New Zealand to extend the country's pulp and paper industries. They are estimated to cost £20 m. p. 523

"AS A RESULT of war-time experiences, planning is being confused with controlling, dictation, and with interference with the liberty of the subject, instead of being recognised for what it really is: the artistic and scientific development of towns and cities," said Mr. R. Lowry West, at the autumn conference of the Scottish Branch of the Town Planning Institute. p. 524

"HOUSES, 1953"

THE introduction to the third supplement* to the Housing Manual, 1949, published by the Ministry of Housing and Local Government and called "Houses, 1953," states that this is a logical successor to "Houses, 1952." The object of the 1952 edition was to show how by compact design £150 a house could be saved whereas "Houses, 1953" shows, as again stated, fresh opportunities for important economies in the use of land and its development, with possible savings of about £35–£50 per house.

It emphasises the need to raise densities and reduce development costs by better integration of house design and layout. Post-war schemes which have been examined by the Ministry show an average density of 47 habitable rooms per acre, and it is suggested this could be increased to 62 without detriment to living space or appearance of the estates; this, for a programme of 300,000 houses, would save 6,000 acres of land.

The new plans in this supplement are designed to suit layouts with access on both sides of the house, which obviates bringing stores, refuse and fuel to the front of the house. This enables an entrance to be made at the front of the house through the living-room or dining recess. The staircases are brought to the back or working part of the house, and to curtail space winders (a practice which has been somewhat frowned upon in the past) have been introduced into the staircases of some of the plans.

It is now suggested in Appendix B that the minimum bathroom can be cut down to 4 ft. 6 in. in width to allow the adoption of a 3 ft. preferred dimension upon which all the plans are worked. It should be noted that no flexibility in room sizes has been conceded.

A three-storey block of four flats from one staircase has been designed with four entrance doors opening off a landing space of about 7 ft. 6 in. square. The central staircase is lighted and ventilated from a lantern the full width of the staircase—a little reminiscent of the open courts in Spain but not quite so charmingly arranged. In all these flats the bedrooms and bathrooms are approached through the living-room. These flats have a fireplace in the living-room with a coal place in the hall. There is also a design for a two-storey block of flats with gardens back and front. This means that the garden to the upper flat is cut off by the access footpath.

The other plans illustrated show the filling in of an internal and external corner, which has often been adopted in the past, and it is pleasing to feel that the Ministry has recognised its usefulness in avoiding unsatisfactory corner gaps. It is interesting also to note that the kitchen sink units have, in many cases, been placed on the side wall, thus leaving the window free.

The main object of this supplement, however, is to show varying types of layout plans, and these have been developed on a known existing site at Harlow. They form four types:

Scheme A. Conventional layout.—The majority of dwellings have direct access to the street and others from footpaths, with open front gardens and laid-out greens.

Scheme B. Cul-de-Sac.—This is a normal layout of cul-de-sac planning but with some of the roads passing along the backs of the houses.

Scheme C shows a single footpath access which entails a long haul for goods from the main road, which means that trade vehicles will stand for a considerable time.

Scheme D shows double footpath access as the houses are set away from the road. Houses look across their own back gardens to an open laid-out garden, and on the reverse side

*Houses, 1953. Published for the Ministry of Housing and Local Government by HMSO Price 3s. net.

they look across an open front garden to the back gardens beyond. The back gardens are all exposed to the road except for a screen wall and in some cases garages. We have seen this type of layout in Sweden where the gardens are not fenced off and where the tenants treat their gardens as pleasant places in which to sit and not as laundry drying grounds or as places for accumulating junk.

This type of development has already been tried in this country without much success, and until local authorities are willing to treat the open spaces properly and keep them in good order and until tenants become garden-minded this form of layout is quite unsatisfactory, and it is still unfortunately necessary to enclose the gardens from view of the road. Given enlightened housing authorities, however, who can kindle enthusiasm among their tenants, there is no reason why this form of layout should not be a success, and we should like to see it tried out. A summary showing the savings which are made by these forms of development is well worthy of study.

A section of this supplement is devoted to roads and to soil stabilisation, and smaller road widths are advocated. A suggestion that more than one service should be put into one trench is also made. How valuable this is and how difficult it is to persuade authorities to follow it out!

The one-pipe system is advocated as costing less, but until we can get rid of all anti-syphon pipes consequent upon this system it is a doubtful saving.

While we hope that in future supplements we may have fewer plans and more information of how the suggestions which have been put forward from time to time are accepted by local authorities and tenants we nevertheless commend this publication as outlining what experienced housing architects would, in the main, regard as good practice, and which if applied over the length and breadth of the country could do much to add to housing amenity and to bring down costs.

"Houses, 1953" outlines several variants of estate layout designed to economise in road works. One method described (Scheme B) shows a normal layout of cul-de-sac planning but with some of the roads running at the backs of the houses. This has, of course, been tried in this country, and the effect that can be produced at the rear is seen in the lower picture. It is not suggested, of course, that firm control by local authorities aided by enthusiastic tenants could not make such layouts acceptable.

COUNTERING THE "HANDLESS MIND"

ON another page an exhibition by public schoolboys at a London shop is reviewed. Except for the unusually liberal educational policy of the school in question, and an analogy in matters of taste of the shop, there is perhaps nothing in the fact that calls for editorial reference. But the event is important by reason of certain implications to which we draw attention, it is hoped without embarrassing either school or shop, who probably claim no more for it than meets the eye.

To underline these it should be remembered that there is no "crankiness" about either party. The school, whose identity is incidental, enjoys a very creditable reputation scholastically and in athletics: similarly, the shop caters for an enlightened average of intelligent taste. Both—with due respect, for it is a compliment—have "a living to earn." It is in these facts that the significance of the event lies, which is incidentally stressed by the choice of the pottery-selling department of the shop, rather than its exhibition gallery.

There are three reasons why the exhibition deserves attention. First, it is essential by such means to offset the insidious growth of that modern menace, the "handless mind." By pap-feeding at second hand under the guise of entertainment, we already risk breeding a race that can neither kick nor hit a ball, play a musical instrument, or, for that matter, "throw" a pot for their own pleasure. But, even more destructively though less often perceived, without first-hand knowledge of such processes, we may soon find ourselves without critical standards wherewith to judge the success or otherwise of those whom we pay to do them for us. There is, however, no better place to start the curative process for this disease of "spectatoritis" than at school, and the one in question makes some such activity obligatory for the first year or two.

Second (and this needs saying at risk of incurring the charge of intellectual and social snobbery, though it is hard fact) it is to such schools that we must evidently continue to look for those who will lead thought, and who will naturally undertake the unpaid responsibility of shaping the thought of others who used to be called "less fortunate," but who are now possessed of a purchasing-power they still have to learn to use. Third, it is increasingly obvious that training for the arts needs to be injected downwards from school-leaving age, if the art schools are to have a sound "clay" to work on. The time for training in the arts after that is all too short, and if there is a case for some early specialisation for science, the church and the armed services, surely there is an equally strong case for some basic and realistic preparation for the arts? The experience of showing their work in the context of a shop is bound to be of the utmost value to the proportion of boys, however small, who will become professionals.

On these three counts alone, the venture deserves support and encouragement, however modest and amateur the results, for the principle illustrated is of an importance which quite outweighs them.

NOTES & NEWS

AMERICAN METHODS

THE publication, "New Methods and Machines," a digest of new developments, compiled from a wide variety of American trade and technical journals, is to be discontinued by the Productivity and Technical Co-operation Division, American Embassy. For some time past full information on the contents of these digests has been distributed by the technical information and documents unit, Department of Scientific and Industrial Research, to trade associations and research associations according to their specific interests.

The DSIR has now agreed to extend this distribution service to those members on the mailing list of "New Methods and Machines." No charge will be made for the first copy of any abstract. Other responsible firms or individuals who are interested in this information should get in touch with Technical Information and Documents Unit, Department of Scientific and Industrial Research, Cunard Building, 15, Regent-street, SW1.

ARCHITECTURAL PHOTOGRAPHY

THE FORTHCOMING exhibition of architectural photography at the Royal Institute of British Architects will be opened by the Earl of Rosse, Hon. ARIBA, at 3.30 p.m. on October 8. The exhibition continues until October 29 (Mondays to Fridays, 10-7; Saturdays, 10-5).

IAAS EXAMINATIONS

THE Incorporated Association of Architects and Surveyors states: In the announcement recently made of the approval by the National Joint Council for Local Authorities of the IAAS Examinations in the quantity surveying and building surveying sections for promotion purposes, it was incorrectly stated that the passing of the *intermediate* examination confers eligibility for promotion in local authority service to posts designated "professional" up to APT. IV and that the final examination confers eligibility for promotion to the higher grades provided that the officer has had five years approved experience.

In fact, passing the intermediate examination does not at present confer eligibility for promotion. Passing of the final examination confers eligibility for promotion up to APT. IV and for promotion beyond that point dependent upon five years' approved experience.

SCHOOLS ARCHITECTS

APPLICATIONS are being invited by Hampshire County Council from architects with specialised experience in the design and construction of schools. Successful applicants will be engaged in connection with certain schools in the Council's major school building programme for 1954-55. Further details are contained in our advertisement columns.

PARTNERSHIP ENDING

THE PARTNERSHIP of Mrs. Barbara Randell and Mrs. Monica Pidgeon as joint editors of our contemporary *Architectural Design* has done more than disprove the dictum that shared editorial responsibility cannot work; it has brought some much-needed colour and sparkle into a branch of newspaper work that can do with these qualities. This partnership is to be broken shortly, for the best of all reasons, by the retirement of Mrs. Randell who before long intends to start specialised farming in Surrey. Her professional colleagues, who mourn her departure, wish her every happiness and success.

At the same time, comes the news that Miss Hilda Allberry has joined the staff of the Dublin *Irish Builder and Engineer*, of which her father, the late Harry Allberry, FRIBA, was for many years the much-liked and respected Editor. To Miss Allberry (who has for some years been an outside contributor to our Dublin contemporary) we also wish good fortune.

AUSTRALIAN BUILDING MISSION

A PARTY of twenty experts representing all sections of the building industry in Australia will leave that country next year to study the latest production methods, particularly in the USA. The team will visit England on the way to America and will confer with members of the British team who studied productivity in the USA in 1949.

The names of the Australian team have been announced by the Building Industry Congress in Victoria, which has handled the arrangements. The leader will be Mr. W. R. T. Longmuir, of Melbourne, a member of the Australian Institute of Builders, and the deputy leader Professor Brian Lewis, FRIBA, head of the Faculty of Architecture at the Melbourne University.

AN APPOINTMENT

THE MINISTER OF EDUCATION has appointed Mr. W. H. Forsdike, CBE, a member of the National Advisory Council on Education for Industry and Commerce.

SHOW FLAT

LAMBETH BC has invited the Council of Industrial Design to co-operate in furnishing a show flat on a large new housing estate at Studley-road, Lambeth. The estate, to be officially opened on October 10 by Mr. Herbert Morrison, MP, is designed by Sir Lancelot Keay, Basil Duckett and Partners, F/ARIBA, and will ultimately cover an area of 26½ acres and provide over 800 homes, in blocks of flats from three to ten-storeys high. The show flat will be open to the public from October 10 to 18 between 2 and 8 p.m.

ARCHITECT'S APPOINTMENT

MR. WARNETT KENNEDY, ARIBA, AMTPI, MSIA, MRAIC, of Glasgow and London, has been appointed consultant architect for the Duke of Westminster's Annacis Island industrial estate, on the Fraser River, near New Westminster, British Columbia, Canada.

PROFESSIONAL ANNOUNCEMENTS

MESSRS. ALEC. F. FRENCH AND PARTNERS, F/LRIBA, wish to announce that they have moved into new premises at Pearl Assurance House, Royal Parade, Plymouth. (Tel.: Plymouth 61152.)

MR. ANTHONY AVENELL, ARIBA, has moved his office from 15, Littledown-Avenue, Queens Park, Bournemouth, to Ellerslie Chambers, Hinton-road, Bournemouth. (Bournemouth 5110).

MR. SERGEI KADLEIGH, ARIBA, has been appointed Reader in Architecture at the Royal College of Art, and is now conducting his practice from c/o Royal College of Art, 23, Cromwell-road, SW7.

MESSRS. HUCKLE AND DURKIN, architects and consulting engineers, announce that they have moved to new premises at 30, Queen Anne-street, W1 (tel.: Langham 4091-3).

The partnership which existed between COL. J. B. MARKS, OBE, FRICS and MR. J. C. CORDER, ARICS, practising as MARKS AND CORDER, chartered quantity surveyors, 106, High-street, Guildford, has been dissolved by mutual consent. COL. J. B. MARKS will continue to practise at 106, High-street, Guildford, and at 33, High-street, Croydon, under the style of J. B. MARKS AND PARTNERS. MR. J. C. CORDER will practise at 28-30, Wigmore-street, W1.

MR. G. W. WALTON, ARICS, chartered quantity surveyor, wishes to announce that he has commenced in private practice at Victoria Buildings, 36, West-street, Gateshead-on-Tyne, 8, Co. Durham, and would be pleased to receive trade catalogues, price lists, literature, etc.

COMING EVENTS

MONDAY, OCTOBER 5.

SOCIETY OF ENGINEERS.—"Surface Finish and its Measurement by Electronic Methods," by Mr. S. F. Smith. Geological Society, Burlington House, W. 5.30 p.m.

TUESDAY, OCTOBER 6

BRITISH COLOUR COUNCIL.—Tenth designers conference. Bath College of Domestic Science. 9.30 a.m.

INDUSTRIAL WELFARE SOCIETY.—Two-day course in industrial law for managers and executives. Exchange Hotel, Liverpool.

WEDNESDAY, OCTOBER 7

ARCHITECTURAL ASSOCIATION.—Talk by Mr. D. Clarke Hall, FRIBA, and Mr. Cyril Mardall ARIBA, on secondary school designed for Middlesex CC. 34, Bedford-square WC1. 6 p.m.

REINFORCED CONCRETE ASSOCIATION.—"Aggregate Grading and Concrete Mix Design," by Mr. D. A. Stewart, MBE, AMICE. 11, Upper Belgrave-street, SW1. 6 p.m.

INSTITUTE OF FUEL.—"The Domestic Appliance Industry and Fuel Usage," by Dr. Harold Hartley, CBE, DSc. Institution of Mechanical Engineers, Storey's Gate, St. James's Park, SW1. 5.30 p.m.

THURSDAY, OCTOBER 8

RIBA AND ROYAL PHOTOGRAPHIC SOCIETY.—Opening by the Earl of Rosse, MBE, HonARIBA, of an exhibition of architectural photography. 66, Portland-place, W1. 3.30 p.m. Remaining open until October 29 (closed October 13). Mondays-Fridays, 10-7. Saturdays, 10-5.

SOUTH-EASTERN SOCIETY OF ARCHITECTS.—Education Committee Students Prize Distribution. School of Art, Knight's Park, Kingston-on-Thames. 2.30 p.m.

RICS (JUNIOR ORGANISATION).—"The Rent Acts" by Mr. R. E. Megarry, MA, LLB. 12, Great George-street, SW1. 6 p.m.

INSTITUTE OF HOUSING.—"Any Questions." County Hall, SE1. 7 p.m.

INSTITUTE OF WELDING (NORTH LONDON BRANCH).—"Automatic Welding," by Mr. R. L. Swan. Mansion House, Portland-place, W1. 7.30 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS.—Inaugural address as president by Mr. H. Bishop, CBE, BSc.(Eng.) IEE, Savoy-place, WC2. 5.30 p.m.

PRESTRESSED CONCRETE DEVELOPMENT GROUP.—Dinner in honour of overseas delegates attending the first congress of the International Federation of Prestressing. Savoy Hotel, Strand, WC2. 8.30 p.m.

FRIDAY, OCTOBER 9

RIBA AND THE ROYAL PHOTOGRAPHIC SOCIETY.—Exhibition of architectural photography. 66, Portland-place, W1. Continuing until October 29. (Mondays to Fridays, 10 a.m. to 7 p.m.: Saturdays, 10 a.m. to 5 p.m.)

SATURDAY, OCTOBER 10

NEW TOWN ORGANISATIONS.—Conference on Social Facilities in New Towns. Victoria Hall, Bloomsbury-square, WC1. 10.30 a.m.

FROM "THE BUILDER" OF 1853

Saturday, October 1, 1853

(FROM THE LEADING ARTICLE)—Smoke is a more tangible opponent to fight against than some people think. "It will all end in smoke," is a common expression to describe something which is, after all, nothing. This is a great mistake. Smoke is not nothing: it is a something which the public find it very difficult to get rid of—an obvious, avoidable evil—one of our disgraces. According to the Parliamentary Reports, we are to have another year without any reduction of its extent and blackness; and it is too much to be feared that the enactment on the subject, even if passed next session, will be one of those trimming measures which serve but to put off the effort to a future day.

CORRESPONDENCE

[Whilst we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

THE WOKINGHAM SCHOOL

To the Editor of *The Builder*

SIR,—Your leading article of September 25 about the Wokingham School may give rise to some misunderstanding. I should, therefore, be grateful if you would allow me to explain that there is no question of this school being "passed on to local education authorities as an officially approved pattern," nor of authorities being "committed to a change of such magnitude and importance."

It is an essential part of the Ministry's policy and practice that any design for a school shall be approved, provided it complies with the Building Regulations and that the appropriate limit of cost is not exceeded. Subject to these two conditions, all local education authorities are free to design each of their schools according to their own ideas, adopting or rejecting at their own discretion solutions to the various problems which have been tried out or suggested by other authorities or by the Ministry. May I quote in conclusion from your contemporary *Education* (the official organ of the Association of Education Committees) for September 25 :

> "The Wokingham School is one of many hundred attempts by Education Authorities and architects to build a school which will provide a suitable environment for teachers and children, within the limits of the resources which the nation can make available. It is not a model to be copied, but one example among many of a joint attempt by educator and architect to resolve the innumerable problems which must be faced by all those who have the task of steering a school building project between the Scylla of the Building Regulations and the Charybdis of the cost limits."

C. G. MOYLE, Press Officer,
Ministry of Education.

Curzon-street, W1.

THE PROBLEM OF HOLIDAYS

To the Editor of *The Builder*

SIR,—Your editorial under the above heading in your issue of September 18, is both interesting and timely. As you say, the organisation of work to satisfy the dual needs of holiday breaks for the workers and continuity of production is a very real problem, and calls for urgent attention.

We are not amongst those builders who have found it possible to close down entirely for any period. Although we do not dispute the economics of the case in favour of a complete stoppage for a short time, as against a longer period of minor interruptions, we have found it more than desirable to keep our sites and works open all the time, mainly because of the outside interests which would be badly affected by a complete stoppage at any particular time.

We hope that your approach to the problem will lead to a satisfactory long-term solution, and our main reason for writing is to suggest, as a contribution to all-round efficiency, that those firms (mainly manufacturers and suppliers) who do decide on a complete stoppage for any period take adequate steps to ensure that all the various interests likely to be affected by a stoppage are advised in good time. Our present troubles are concerned not so much with the "half-cock" difficulties arising from continuous working, as from the serious handicap caused by those who go on holiday without telling us.

NORMAN LONGLEY, Director,
James Longley and Co., Ltd.

Crawley, Sussex.

"A HARSH CONTRACT PROVISION"

To the Editor of *The Builder*

SIR,—I was very interested in the case A. E. Farr, Ltd. *v.* Admiralty, commented on in your leading article of September 25. It emphasises once more the extreme difficulty in which contractors find themselves when they are asked to sign a contract document imposing inequitable and onerous conditions over a matter that is extremely unlikely to arise in practice on any one contract.

A point that may be made, however, is that nothing in CCC/Works/1 can take away from the contractor his rights at common law against any person who may negligently damage the works while under his care. If, therefore, the vessel negligently collided with the jetty, then it would seem that the contractor has a perfectly good case against the captain of the vessel.

GEOFFREY BEARD.

Victoria-road, Swindon.

"But, Euphemia—you can't keep altering your mind every time a new Housing Manual appears!"

THE SALTAIRE CENTENARY

To the Editor of *The Builder*

SIR,—The Centenary of Saltaire, to which you called attention in your last issue, reminds us of the debt we owe to those enlightened industrialists of last century who made the welfare of their workers a first charge on profits and so paved the way for the great social and industrial progress which has since been made. Robert Owen (1771-1858), the pioneer of the movement, did not achieve all that he hoped for at New Lanark, but Titus Salt (1803-1876, made a baronet in 1859), perhaps because of the greater realism of his methods did all that he set out to do ; and in founding the industrial township of Saltaire (the latter part of the name is derived from the adjacent River Aire), he gave the initial impetus to a movement that can be said to have given us Port Sunlight, Bournville, and the Letchworth and Welwyn Garden Cities, as well as the New Towns of the post-war era.

After building his great Italianate mill for the spinning of new fibres (the best of these coming from the coat of the formerly neglected alpaca), Salt proceeded to attend to the physical, spiritual, intellectual and recreational needs of his workers by providing, among other buildings, 800 model dwelling-houses, a public dining-hall, a Congregational Church, a hospital, a school, public baths and washhouses, a clubhouse and institute, an almshouse and infirmary, together with a public park, so making Saltaire the first complete example of a manufacturing town especially designed for its purpose.

The village no longer belongs to the mill, and is now a part of the greater urban area of Shipley and under public control, but except for the washhouse and the Salt mansion, which is a ruin, it survives virtually intact, a monument to humanitarianism and enlightened self-interest. The whole place is solidly built of local stone, the community buildings, like the great mill itself, being in the monumental manner, the houses laid out in rows of dignified if rather unimaginative simplicity. As a pioneer industrial township, Saltaire possesses unique historical interest and one hopes that it may be preserved. YORKIST.

NEW STREETS ACT, 1951

To the Editor of *The Builder*

SIR,—The issue of the Ministry of Housing and Local Government's Circular No. 56/53 should certainly lead to some improvement in the working of this Act. In our experience, no two local authorities have the same ideas as to its interpretation, but even now the fact that a cash deposit is in no way necessary has probably not been brought fully home.

The Act specifically states that security, i.e., a surety bond, can be provided in lieu of a cash deposit, and certainly this represents the best course open to the contractor in many cases, particularly as the cost of a New Streets Act Bond is in approved cases purely nominal.

R. H. NYE, Director,
Tate, Emes and Co., Ltd.

London, WC1.

Perspective (drawn by James Gardner) of the winning scheme. Below: Site plan.

Competition for Flats, Marine Parade, Dover, Kent

Assessor
ARTHUR W. KENYON, CBE, FRIBA, MTPI

Winners
DALGLIESH & PULLEN, FF.RIBA

THE assessor in this open architectural competition for 303 flats on a site on Marine Parade, Dover, for the Corporation —Mr. Arthur Kenyon, CBE, FRIBA, Dist.TP, MTPI—made his award on Tuesday evening as follows :

1st (1,000 gns.). Dalgliesh and Pullen, FF.RIBA, 17, Fitzhardinge-street, Portman-square, W1.

2nd (500 gns.). F. Russell Cox, FRIBA, Red Lion House, Burford, Oxford.

3rd (250 gns.) : Jackson and Edmonds, FF.RIBA, 116, Colmore-row, Birmingham.

4th (150 gns.) : Henry Braddock and D. F. Martin-Smith, A & FRIBA, The East Gallery, St. John's Church, St. John's Wood, NW8.

5th (75 gns.) : Stewart and Hendry, FRIBA, 90, Fenchurch-street, EC3.

6th (50 gns.) : J. Brandon-Jones, AA Dipl., ARIBA, and Kenneth G. Miller, ARIBA, 2, Redington-road, NW3.

The designs placed 1st, 2nd and 3rd are now illustrated. The whole of the 144 designs submitted will be on view from Monday next, October 5, until Saturday, October 10, at the Town Hall, Dover. There will be a further exhibition of the six premiated designs at the RIBA, 66, Portland-place, London, W1, from Wednesday, October 14, to Thursday October 29, all dates inclusive.

THE WINNERS' REPORT

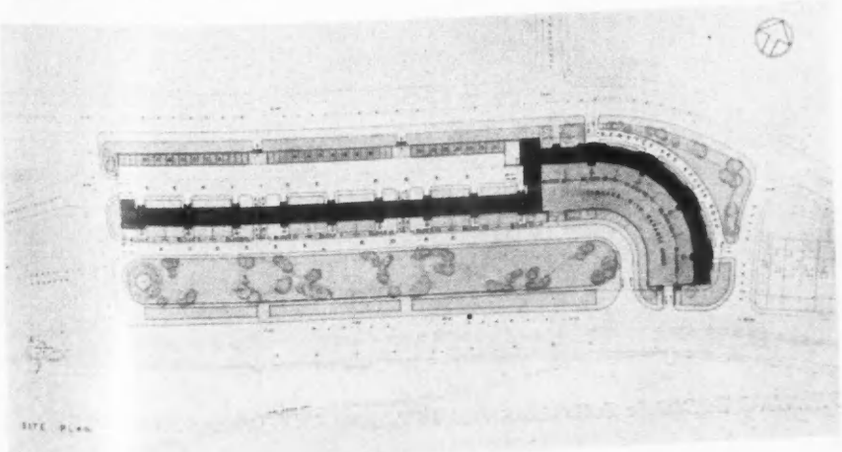
The winners' report states that the development of the land makes provision for a total of 301 flats incorporating 1,003 habitable rooms, as follows :—

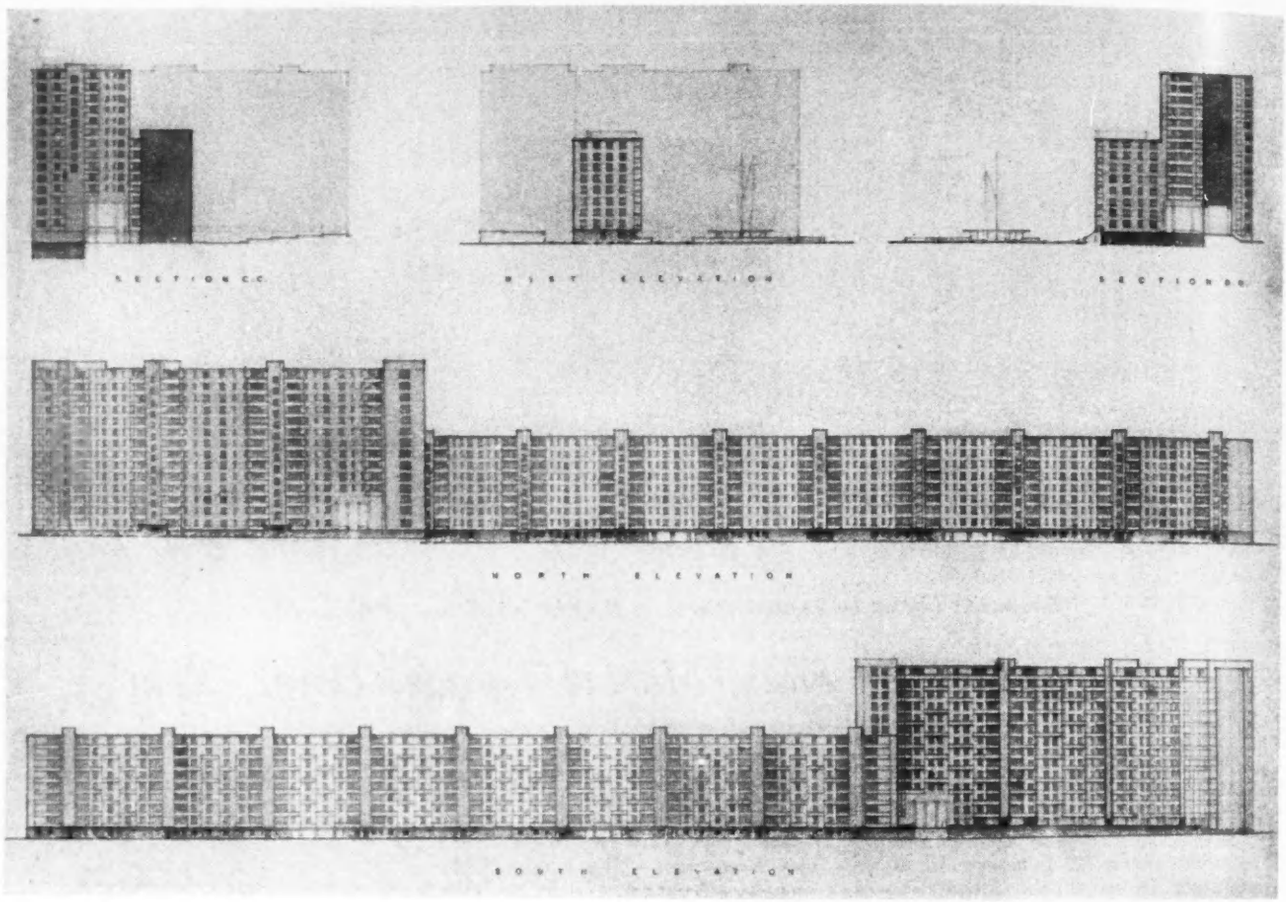
39 two-room flats with a total of 78 habitable rooms accommodating 85.8 persons ; 139 three-room flats with 417 habitable rooms accommodating 458.7 persons ; 107 four-room flats with 428 habitable rooms accommodating 470.8 persons ; and 16 five-room flats with 80 habitable rooms accommodating 88 persons ; giving a total of 301 flats with 1,003 habitable rooms accommodating 1,103.3 persons. Provision has been made for 52 lock-up garages and communal garage space, in addition, for 65 cars.

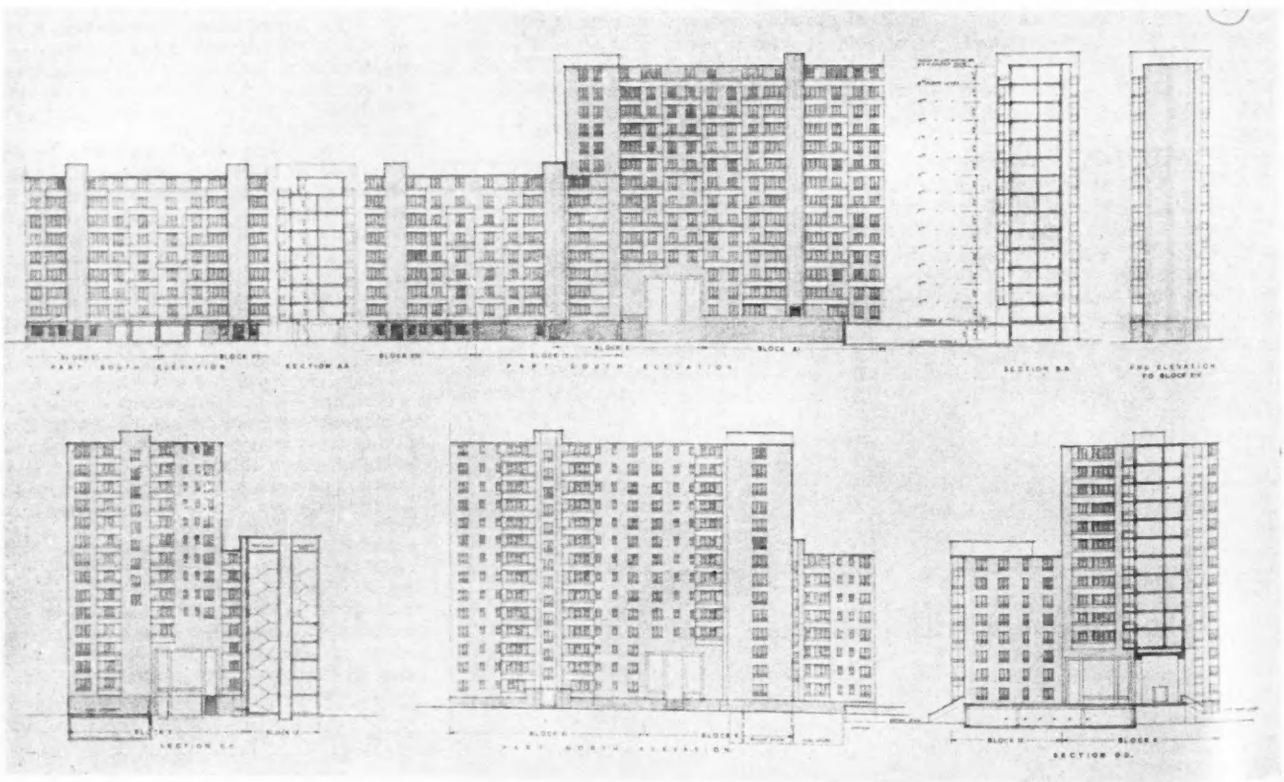
Layout.—The flats are divided into 14 separate adjoining blocks. Blocks I-IX are nine storeys high and blocks X-XIV 15 storeys high. The lower series of blocks are in line and facing directly out to sea in a SE direction, the sitting-room and at least one bedroom in every flat having an uninterrupted sea view. The higher series are in crescent form, and face generally due south.

Planning.—Each block is served by its own individual lift with collective control in both directions, main staircase and additional fire escape staircase from the 6th storey upwards. Refuse chutes have been provided at the rear of each block, the access to them being from small private balconies. The chutes rise to roof level so that they can be cleaned from the top. Service ducts pass vertically through each flat and contain hot and cold water supplies, cold rising main, soil and rainwater drainage, electric mains and telephone cables.

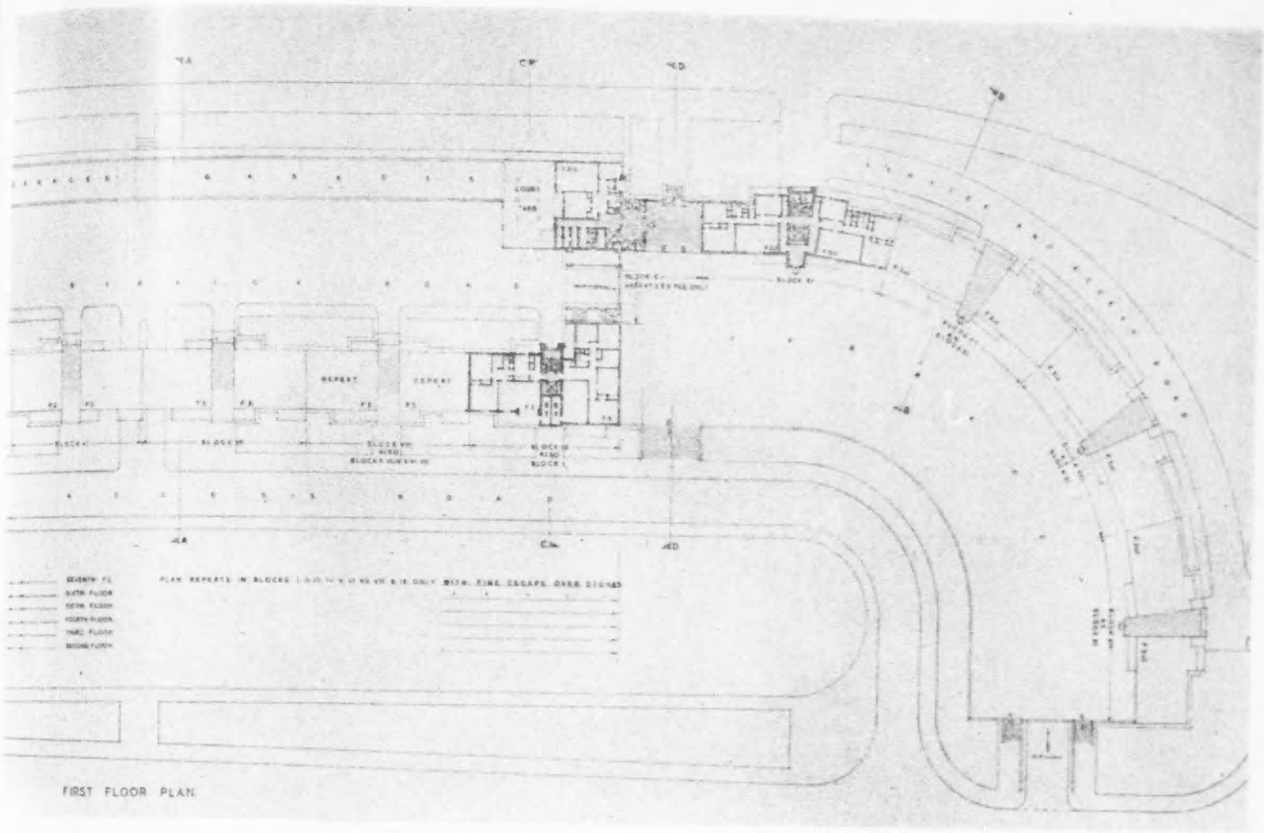
Structure.—All blocks are of a monolithic reinforced concrete structure, each block having six 6 in. r.c. transverse vertical spine walls, one each side of the staircase and lift towers, one at each end of each block and an intermediate one between the staircase tower and the end of the block forming an internal partition. Floors and roof will be 5 in. solid r.c., the cantilever balconies being 4 in. thick. External walls are of 9 in. brickwork built 4½ in. proud of all concrete spine walls, beams, etc. Internal walls have as inner lining 2 in. slabs of lightweight expanded clay aggregate on felt strips, with a 2 in. cavity between them and the external brickwork. The roof will be covered with asphalt on screed laid on an insulating bed of 2 in. lightweight expanded clay aggregate. External brickwork will be in a warm grey stock with light pointing, except at ground floor, where a dark purple brown matt-finished tile will be used. Cost of the scheme is estimated at £773,573.

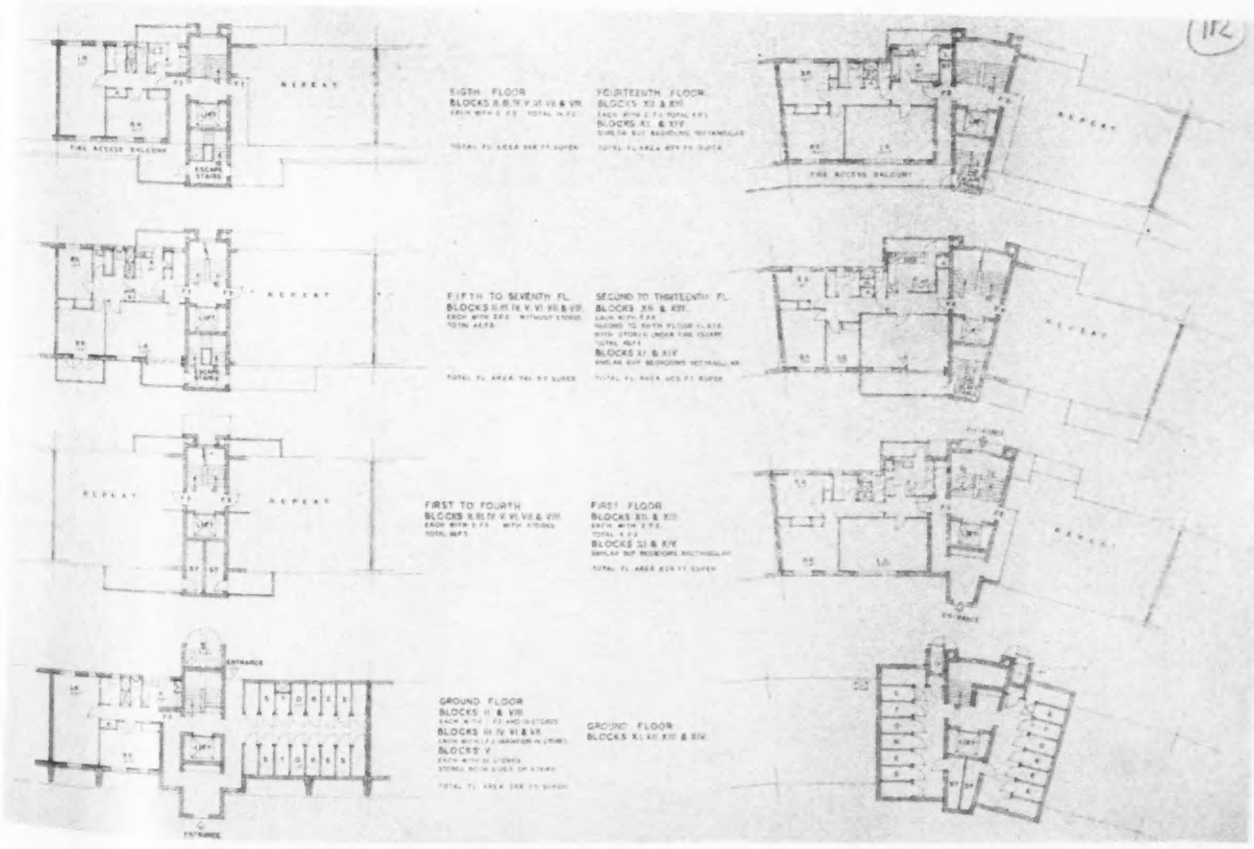




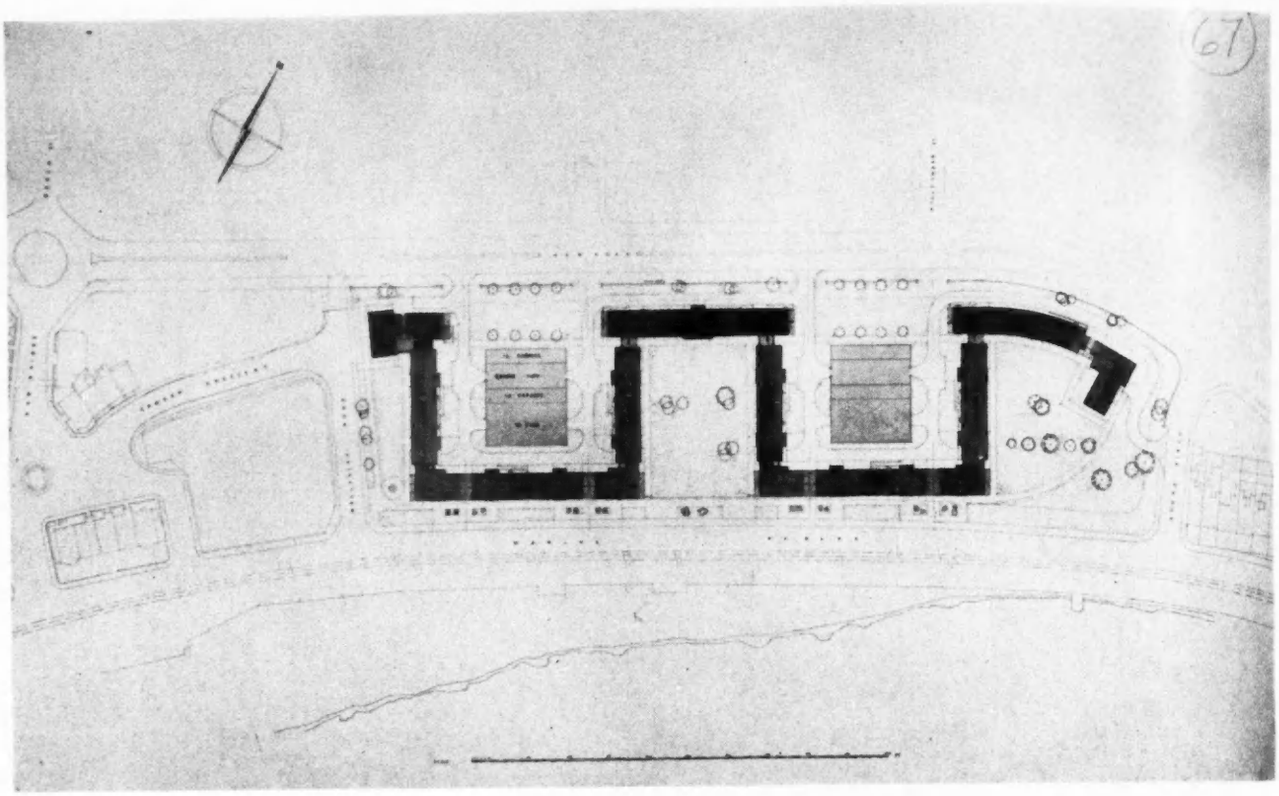


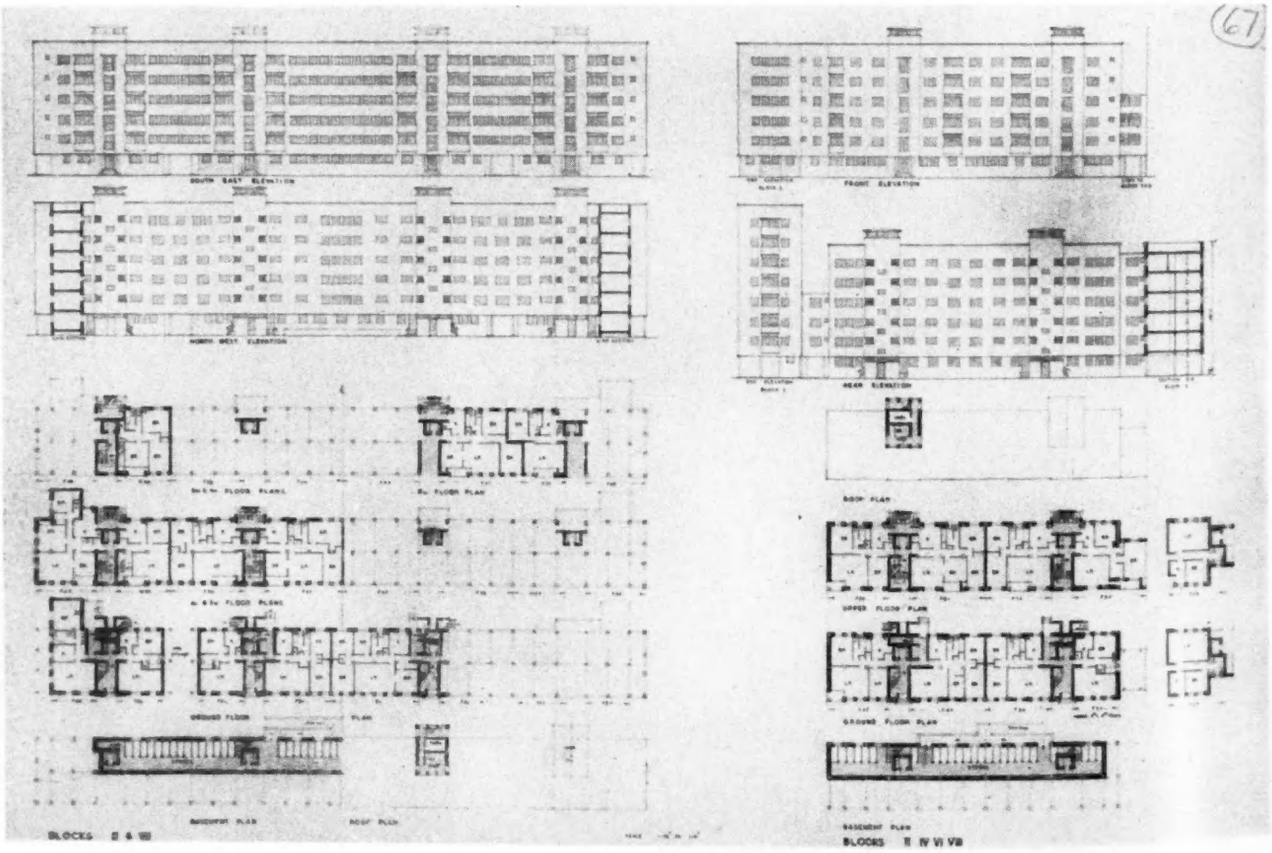
DOVER FLATS COMPETITION : WINNING DESIGN : DALGLIESH & PULLEN, FF.RIBA, ARCHITECTS



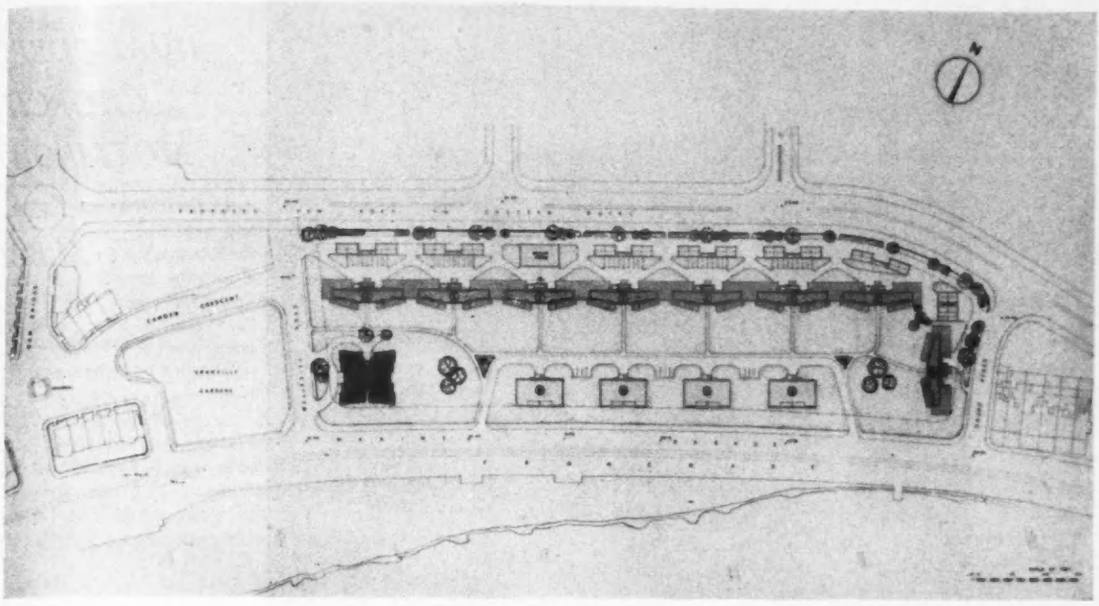

EIGHTH FLOOR
BLOCKS II, III, IV, V, VI, VII & VIII
FOURTEENTH FLOOR
BLOCKS XII & XIII
BLOCKS XI & XIV
FIFTH TO SEVENTH FL.
BLOCKS II, III, IV, V, VI, VII & VIII
SECOND TO THIRTEENTH FL.
BLOCKS XII & XIII
BLOCKS XI & XIV
FIRST TO FOURTH
BLOCKS II, III, IV, V, VI, VII & VIII
FIRST FLOOR
BLOCKS XII & XIII
BLOCKS XI & XIV
GROUND FLOOR
BLOCKS II & VIII
BLOCKS III, IV, VI & VII
BLOCKS V
GROUND FLOOR
BLOCKS XI, XII, XIII & XIV

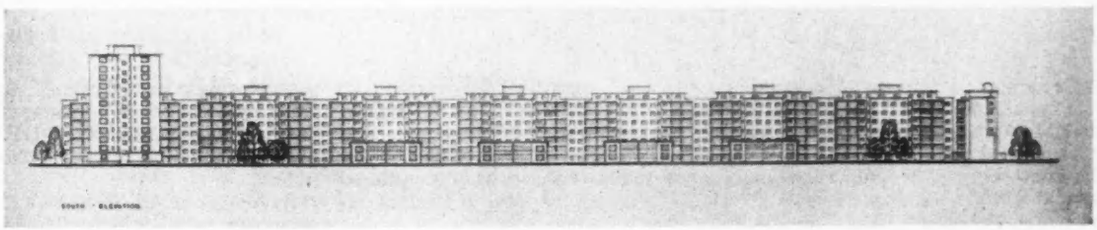
DOVER FLATS COMPETITION: WINNING DESIGN: DALGLIESH & PULLEN, FF.RIBA, ARCHITECTS

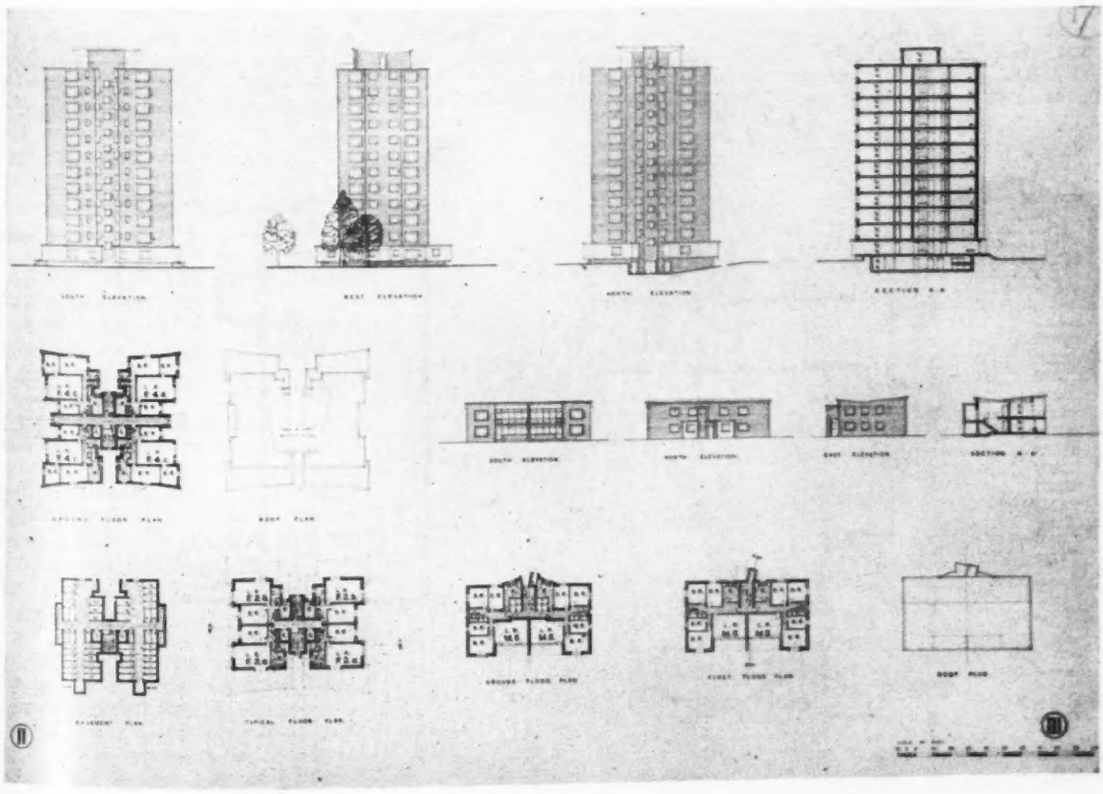




DOVER FLATS COMPETITION : DESIGN PLACED SECOND : by F. RUSSELL COX, FRIBA







DOVER FLATS COMPETITION: DESIGN PLACED THIRD: by JACKSON & EDMONDS, FF.RIBA

DUAL-PURPOSE CHURCH, MOTTINGHAM (Co'dharbour Farm Estate), ST. ALBAN

Architects
COVELL & MATTHEWS, F&ARIBA, AMTPI

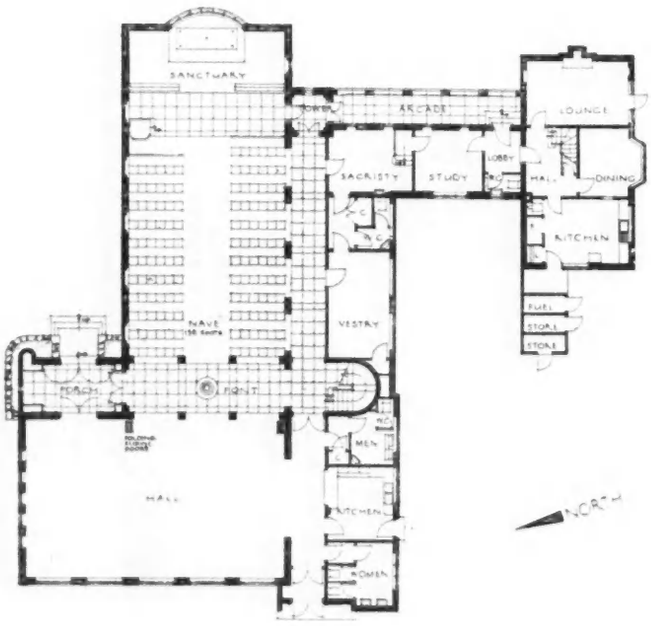
View of model, looking we t.

HIGH building costs and shortage of funds make it impossible for the Church generally to build at a pre-war rate, and dual-purpose churches have become necessary, particularly in new centres of population. The Incorporated Church Building Society has published a booklet entitled "The Dual-Purpose Church," containing illustrations and descriptions of seven such churches erected in various parts of the country and three projects in the Southwark diocese, together with articles by the Rev. Canon Laurence Brown, MA, and Mr. Leslie T. Moore, MC, FRIBA. The plans illustrate (a) total use of the entire floor space for worship and social activities, (b) partial use with hall as separate unit, and (c) unified schemes for church, hall and parsonage, with provision for individual use as desired. The publication shows what can be accomplished by skilful planning to meet individual requirements.

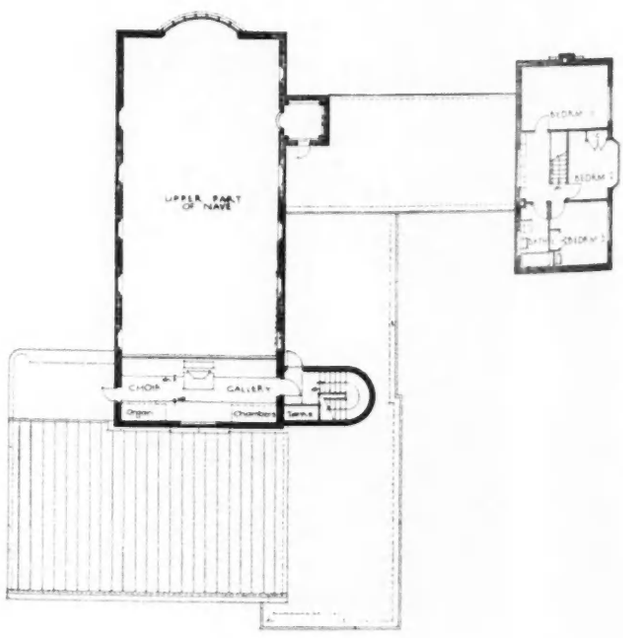
The church and hall illustrated show planning to provide supplementary church seating space, if required. The hall and ancillary seating accommodation can be entirely separated from the church. The parsonage house has a study *en suite*, with sacristy to provide domestic privacy for the priest. Choir and organ are accommodated in the gallery at west end of church. Seats for 138 are provided in nave. Folding sliding doors separate hall from church. Gas heating by overhead radiants can be individually controlled.

Buildings are of brick, with tiled roof to parsonage and asbestos-based bituminous built-up roofing elsewhere. Contract price £17,880, including approximately £3,700 for parsonage.

The booklet may be obtained (price 3s. 7½d. post free) from the Incorporated Church Building Society, 7, Queen Anne's-gate, London, SW1, which continues to make grants for church building and repairs.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

"HOUSES, 1953"

Economies in Land Use

HOUSES, 1953,* published on September 29, is the Ministry of Housing and Local Government's major handbook of the year. It is the logical successor to "Houses, 1952," for both are developments of current housing policy.

A year ago the object was to show how, by compact design, building costs could be cut by £150 a house, and space and materials saved without loss of standards or amenity; this has compensated for rising building costs.

"Houses, 1953" shows new opportunities for important economies in the use of land and in its development. It emphasises the need to raise densities and reduce development costs by better integration of house design and layout. Comprehensive study is recommended, and it points out that the inter-relation of house and layout has not received sufficient attention.

In the course of a foreword the Minister, Mr. Harold Macmillan, writes:

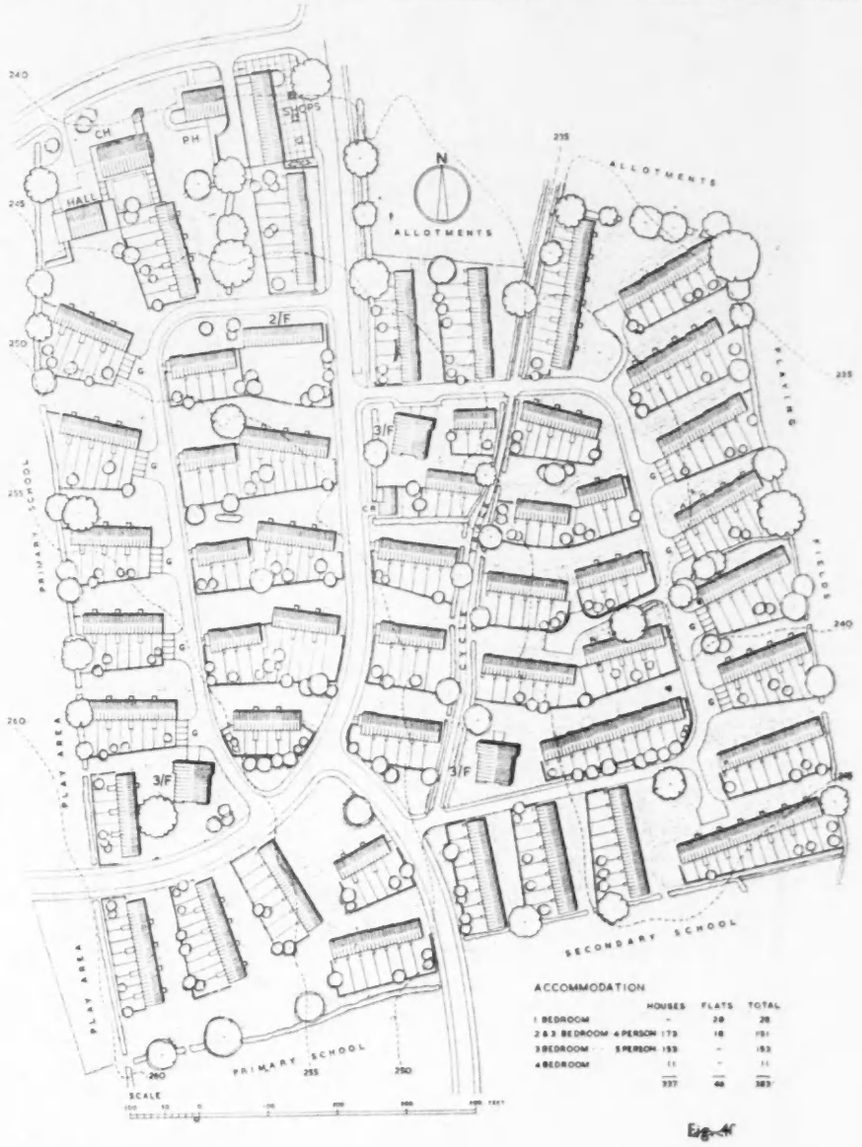
"Last year 'Houses, 1952' suggested to local authorities and others ways in which more homes could be built from a limited supply of materials, labour and capital without loss of standards or amenity. Housebuilding has gone up by nearly half as much again since then. But the resources available for housing have not increased proportionately. 'Houses, 1953' shows new ways of saving both labour and materials, and adds a third and vital element—saving land. It shows at the same time how our layouts can be improved and made more attractive to the eye as well as to the pocket.

"Badly planned estates may mean untidy development, needless roadwork, more costly services, urban sprawl, long walks to shops and schools, traffic danger to children and waste of land. The estate layout and the house designs should be planned together from the start. 'Houses 1953' seeks to show how this forethought can produce attractive yet economical schemes, better integrated with the towns they serve and more zealous in their regard for the land they use."

The introduction to the handbook, which summarises its main arguments, points out that a year ago savings of £150 a house—equal now to 2s. 8d. a week in rent—were made by compact design of the houses. Over three-quarters of the three-bedroom houses now in approved contracts are designed to achieve these savings. The introduction continues:

"'Houses, 1953' takes a new theme. The purchase of land, the construction of roads and sewers, and the building of houses, are three distinct operations carried out at different times. As a result the cost of each item is often considered in isolation. But the total cost of all three largely determines rents. Therefore it follows that economy in the use of land, in the construction of roads and services, and in the cost of houses must constantly be kept in mind *from the start*. One penny saved on the cost per square foot of a house of about 900 sq. ft. gross will save nearly a penny per week in the rent and reduce the cost of 300,000 houses by over one million pounds.

"This 1953 supplement to the Housing Manual is in four parts. PART I describes the planning of frontage-saving houses suitable where access is provided on both sides. There are also plans of three-storey flats and designs for corner sites at internal and external angles. The



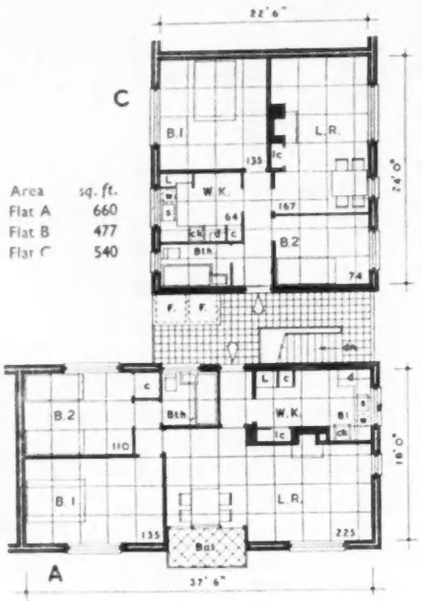
From "Houses, 1953."

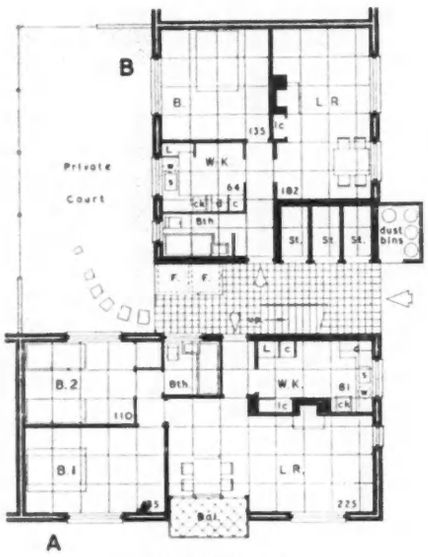
DOUBLE FOOTPATH ACCESS LAYOUT. In this all the houses are frontage-saving and in terrace blocks at right angles to the road with footpath approach to both sides. Footpaths are 5 ft. wide. The area of incidental open space to be publicly maintained is 80 sq. yds. per dwelling. An analysis of this layout study (example D) compared with the average figures from 48 post-war schemes is as follows:

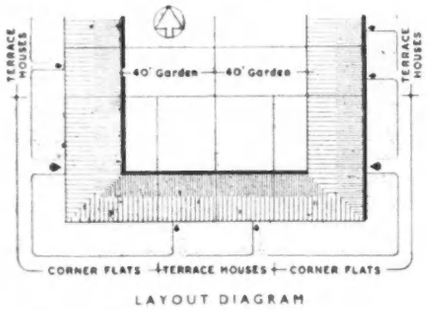
Type	*Number of Dwellings*	*Density in Habitable Rooms per Acre.*	*Area of Road per Dwelling in sq. ft.*	*Area of Footpath per Dwelling in sq. ft.*	*Houses Only*		
					Average Building Frontage per House in ft.	*Average Road Frontage per House in ft.*	*Difference between Building and Road Frontage per House in ft.*
1.	2.	3.	4.	5.	6.	7.	8.
Example D—Double Footpath Access ..	383	63.67	230	205	18.72	21.94	3.22
Average of 48 Current Schemes	338	47	378	249	28	41.8	13.8

NOTES: Column 3.—If the area of the cycle track were omitted from the density calculations the effect would be to increase the average net density of the examples by 1.39 habitable rooms per acre.
Column 4.—The area of road per dwelling is inclusive of turning spaces.
Column 6.—The building frontage means the actual building frontage taken up by the house and outbuildings plus an allowance of 4 ft. at each end of each block.
Columns 6-8.—The figures exclude the flats in the schemes and the roads serving them.

* "Houses, 1953." Third supplement to the Housing Manual, 1949, published by HM Stationery Office, price 3s. net.

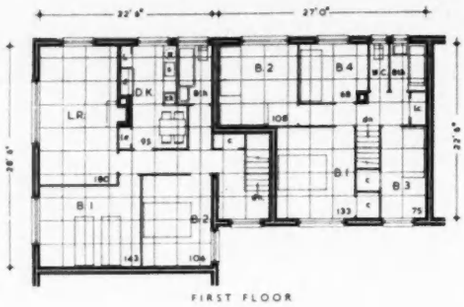




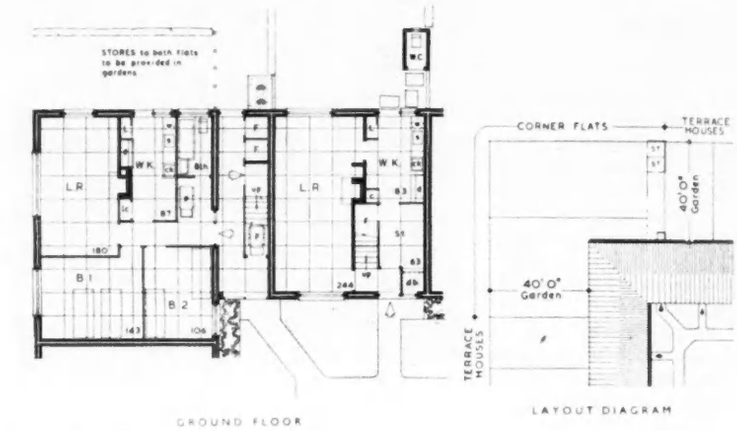


From "Houses, 1953."

TWO-STOREY CORNER FLATS for households of two, three and four persons designed to link terraces of different depths sited at right-angles to each other. To ensure privacy to the back windows on the ground-floor flats the entrances to the flats and the stores are from the staircase hall. The layout diagram shows the method of using the block to link terraces of houses.

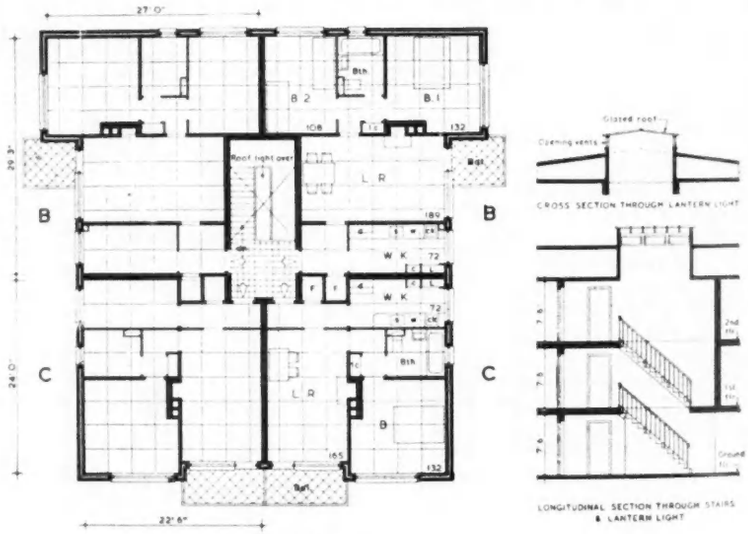


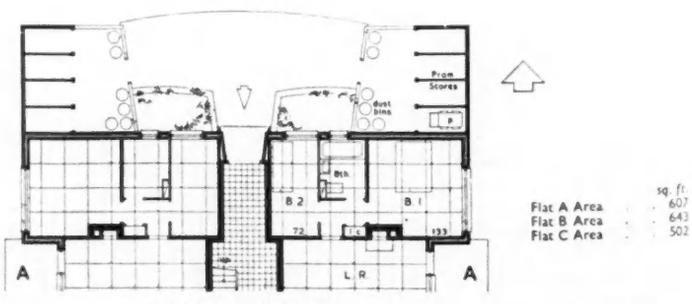
	sq. ft.
Ground Floor Flat Area	641
First Floor Flat Area	724
House :	
Gross House Area	969
Storage	63
Net House Area	906
Aggregate Ground Floor Living Area	327



From "Houses, 1953."

Two-storey "internal" corner flats for four-person households linked to a four-bedroomed adaptation of a design shown in Fig. 23 of the report of the Committee on House Interiors (the Bailey report).





	sq. ft.
Flat A Area	607
Flat B Area	643
Flat C Area	502

From "Houses, 1953."

Three-storey flats for households of two, three and four persons.

designs have been prepared by the Ministry's architects with the assistance of a panel of architects appointed by the associations of local authorities.

"PART II shows how layout and house plans can be co-ordinated and land and money saved. Three basic types of layout—conventional, 'service cul-de-sac' and footpath access—are reviewed.

"PART III deals with the design and construction of roads and services. A distinction is drawn between roads serving general traffic needs and roads serving a limited purpose in a residential precinct.

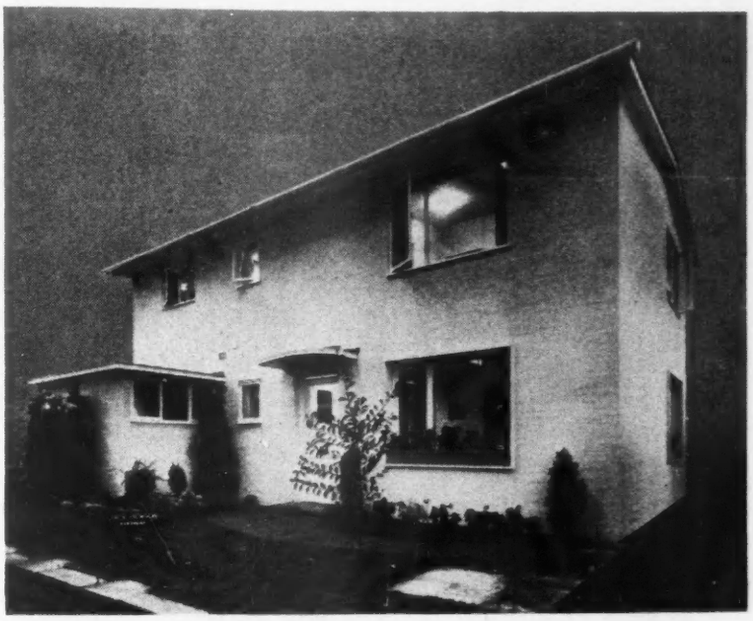
"PART IV illustrates the advice given in Parts I, II and III by a series of layout studies for an actual site at Harlow New Town. Various themes are demonstrated with comparative statistical data. They have been designed within the framework of the Master Plan for the whole of the New Town and with the basic information which is normally available to a housing architect. This includes the physical characteristics and contours of the site, the location of shopping centres and other amenities, the alignment and widths of main streets, the permitted net densities in habitable rooms per acre, and the proportion of each house size needed. The net density of all the schemes is about 62 habitable rooms per acre.

"This handbook shows economies in land and money which can be achieved by well co-ordinated design without drabness and monotony. Britain cannot afford to waste a single acre of land."

In addition to the main chapters there are four appendices. The first gives a table showing savings in weekly rent for various savings in capital cost at different rates of interest. Appendix B revises some of the advice given on certain aspects of house design, fittings and equipment in the Housing Manual, 1949, in the light of four years' experience by local authorities and their tenants. Next there is an appendix dealing with the technicalities of soil stabilisation, a method by which roads can be built more cheaply, and finally a short appendix dealing with the provision of tenants' meeting rooms on housing estates where there is a positive need which cannot be met by using other buildings.

The handbook states that where it is possible to adopt the various suggestions, the savings may well be about £35–£50 per house, assuming average constructional and land costs; land and valuable materlals will also be saved.

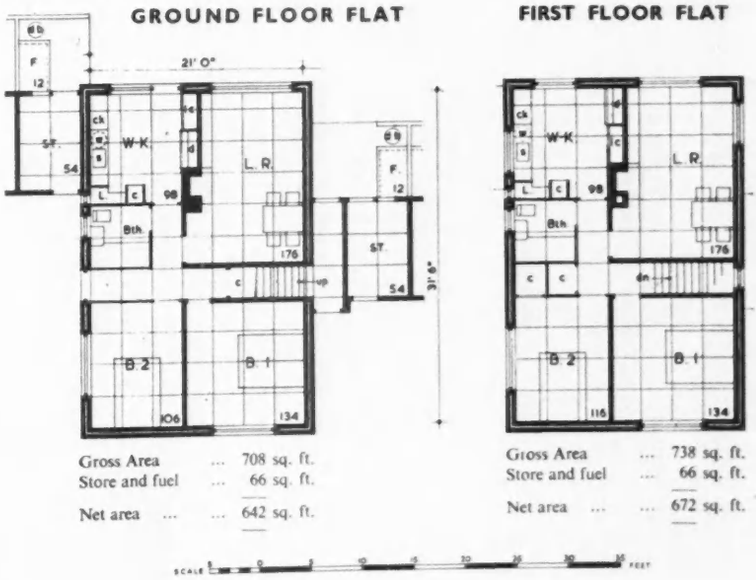
Introducing the book on Monday, MR. ERNEST MARPLES, MP, Parliamentary Secretary to the Ministry, stated that an estimated 6,000 acres of land could be saved by using the advocated methods on a programme of 300,000 houses. "It is essential," he said, "that engineer, architect and landscape architect be together at the start of every housing scheme." In travelling about the country he had been appalled at the gap in quality between the best layouts and the worst. In reply to a question, Mr. Marples stated that public opinion would not allow departure from the Dudley room sizes. Small tolerances of up to three per cent. had been allowed in adapting some of the plans to take advantage of the recommendations of the Bailey report.



NEW COTTAGE FLATS: An Economical Design

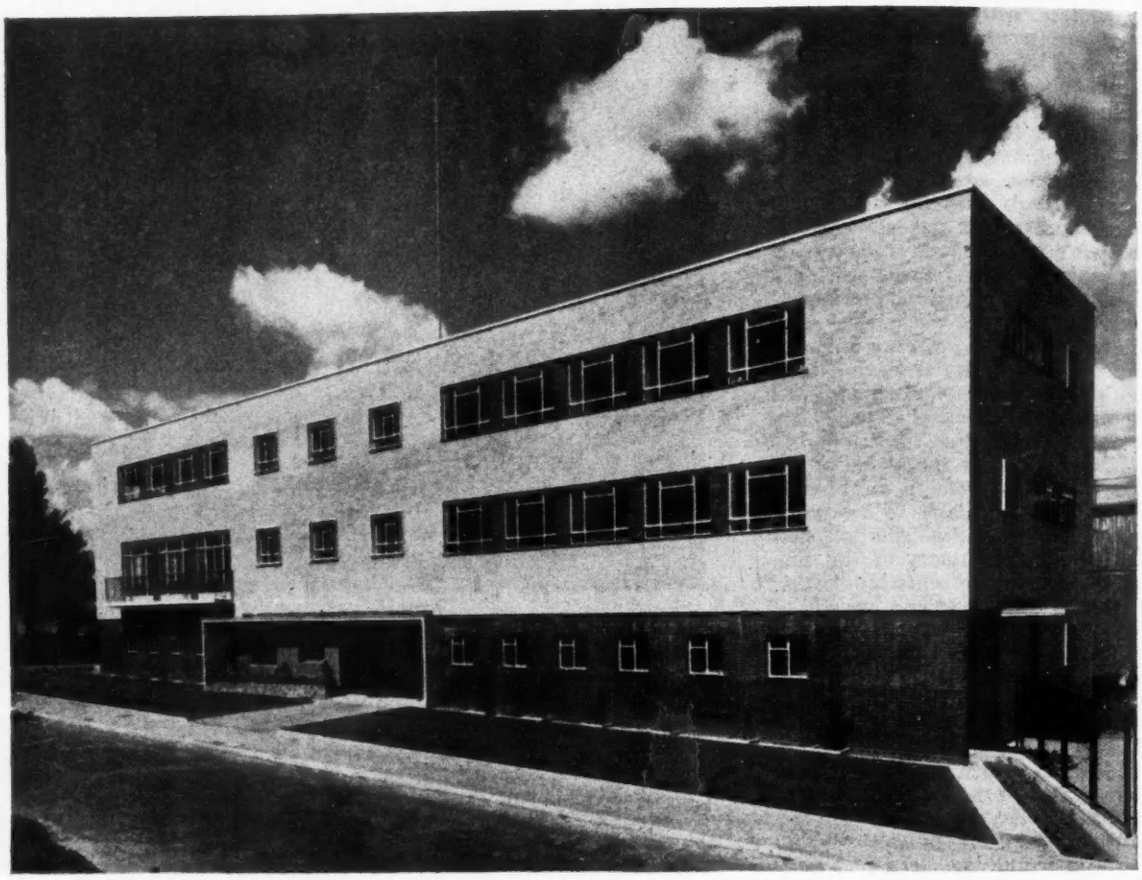
TWO-STOREY Cottage Flats which are cheaper to build than a pair of similar-sized council houses, and yet retain such features of a house as a separate entrance and garden for each, are being exhibited by the Ministry of Housing and Local Government at the Birmingham Mail Midlands Ideal Home Exhibition at Bingley Hall, Birmingham, until October 17. The block exhibited (and now illustrated) comprises two flats—one on the ground floor and one on the first floor. Each flat has a large living-room, two bedrooms, a fully equipped kitchen, and a combined bathroom and w.c. Each also has its own store room and fuel bunkers, and the two independent entrances to the upper and lower flats are on the opposite sides of the building. In this way each flat has direct access to its own private back garden.

It is estimated that each of these flats can cost well over £100 less to build than the average two-bedroomed council house of similar size being built now. Not only can they be built to occupy less land than houses—an important consideration where valuable agricultural land has to be used for building—but there are other savings: only one staircase is needed for each pair, no party wall is required, and the design of the flats allows for economical plumbing and drainage as the bathrooms and kitchens are grouped together.



KEY TO PLANS:

L.R.	*Living Room*	ST.	*Store*	db.	*Dustbin*	w.	*Wash boiler*
B.	*Bedroom*	L.	*Larder*	s.	*Sink*	d.	*Dresser*
W.K.	*Working kitchen*	F.	*Fuel store*	ck.	*Cooker*	c.	*Cupboard*
Bth.	*Bathroom*					l.c.	*Linen cupboard*



A general view from the south-east.

OFFICES AT THE ALDERNEY WATERWORKS, BOURNEMOUTH

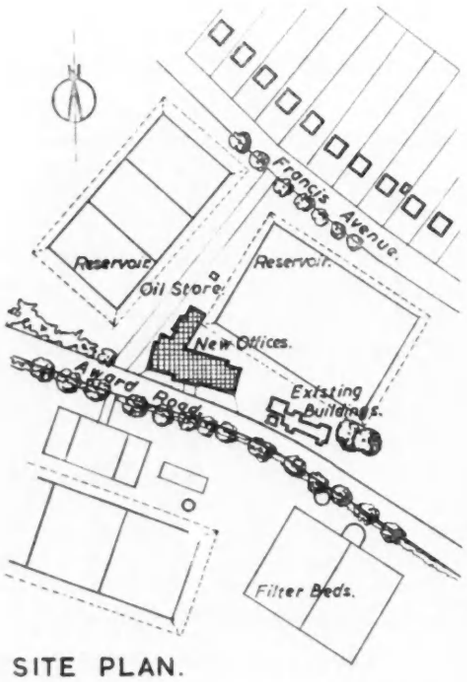
Architect
RAGLAN SQUIRE, FRIBA, MSIA

Consulting Engineer
F. J. SAMUELY, BSc(Eng)Lond, AMICE, MIStructE

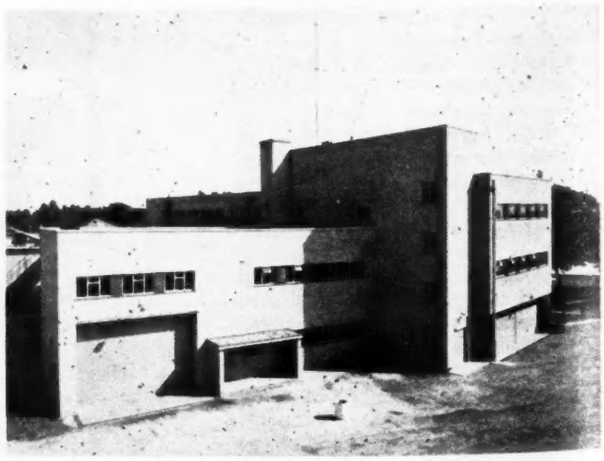
Quantity Surveyors
DAVIS, BELFIELD & EVEREST

Builders
RICE & SON, LTD.

Clerk of Works
L. NASH



SITE PLAN.



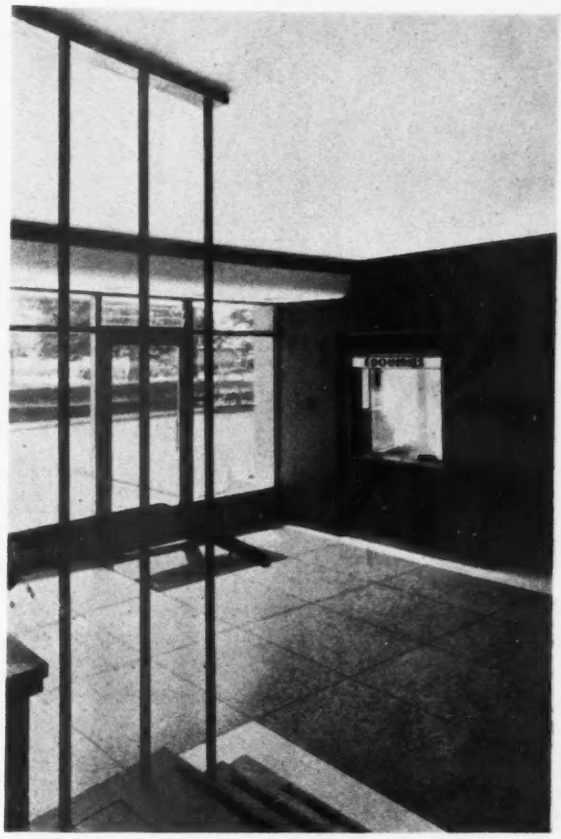
View from south-west.

THE Nationalisation of the gas industry in May, 1949, made it necessary for the Water Division of the Bournemouth and District Gas and Water Co., now known as the Bournemouth and District Water Co., to vacate their existing offices in Bournemouth and build new accommodation on the site of their existing waterworks at Alderney. The accommodation to be provided consisted of office space for both executive and general staff, laboratories for testing water samples, a drawing office, canteen, storage and workshop space for materials and vehicles.

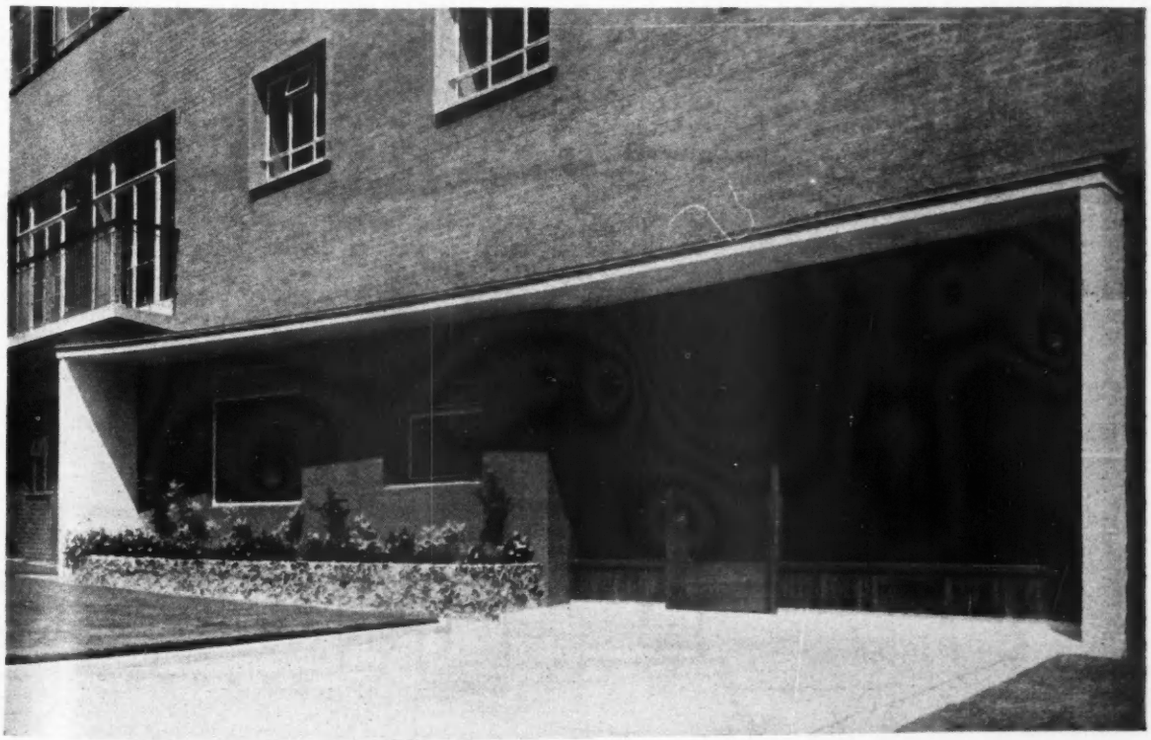
FLOOR CONSTRUCTION

Apart from designing a building that avoided materials in short supply, the problem was basically one of providing large areas which could easily be sub-divided should reorganisation of office space become necessary. The solution was to have maximum flexibility of partition layout. The floor areas required for workshop and storage of both vehicles and material required a comparatively wide span if the other departments were to fit into the desired block. This presented an interesting structural problem. There were several solutions, but if internal supports were eliminated in order to facilitate planning and flexibility, a clear span in the region of 30-35 ft. resulted.

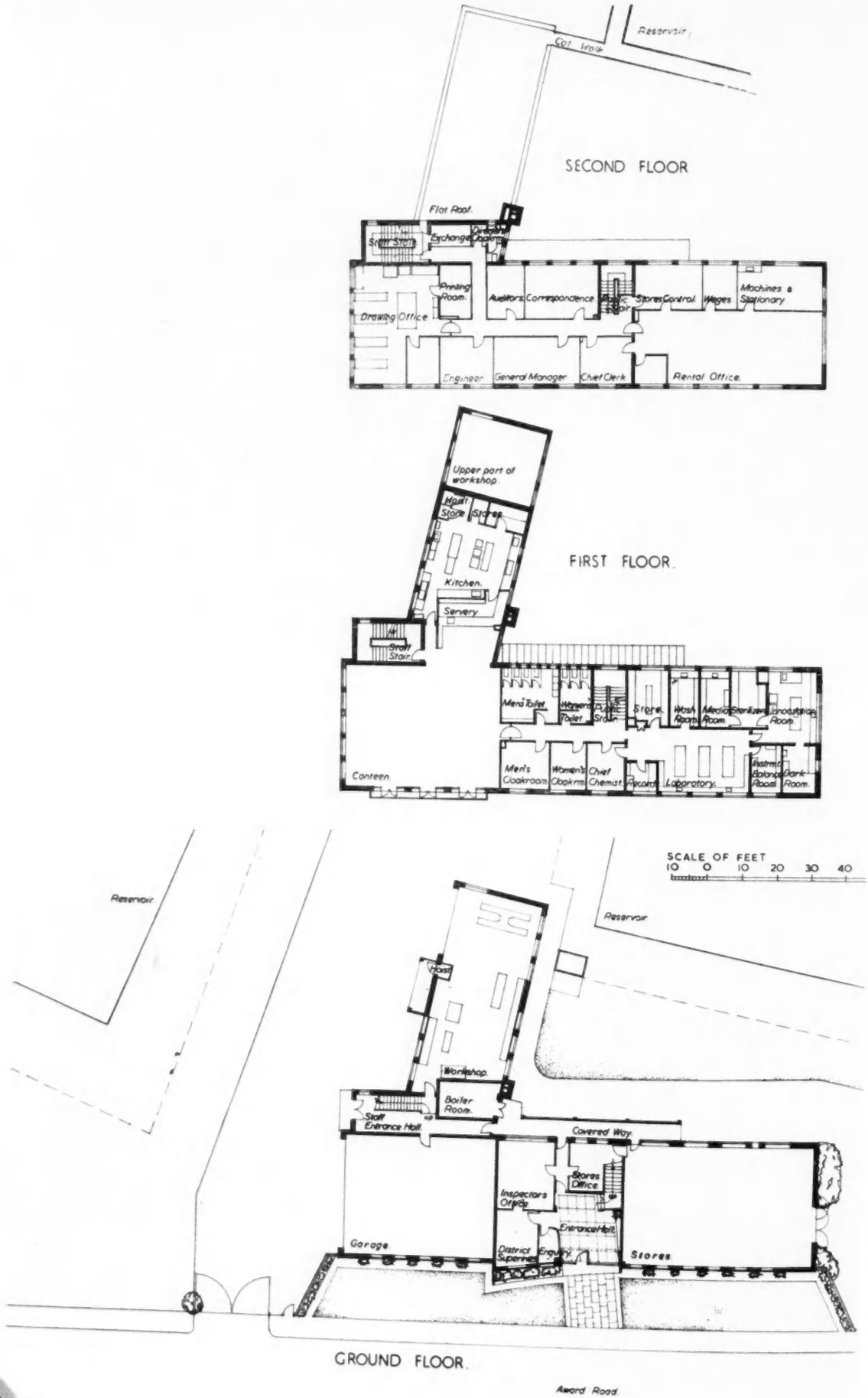
The consulting engineer, Mr. Samuely, took the view that precast and prestressed construction would be advantageous and a composite system of construction was selected consisting of precast concrete units with *in-situ* topping. Such a composite construction was to be designed so that the precast units could be erected quite independently of the *in-situ* concrete. In this way the erector had at no time to wait for grouting and the maximum speed of erection could thus be achieved.

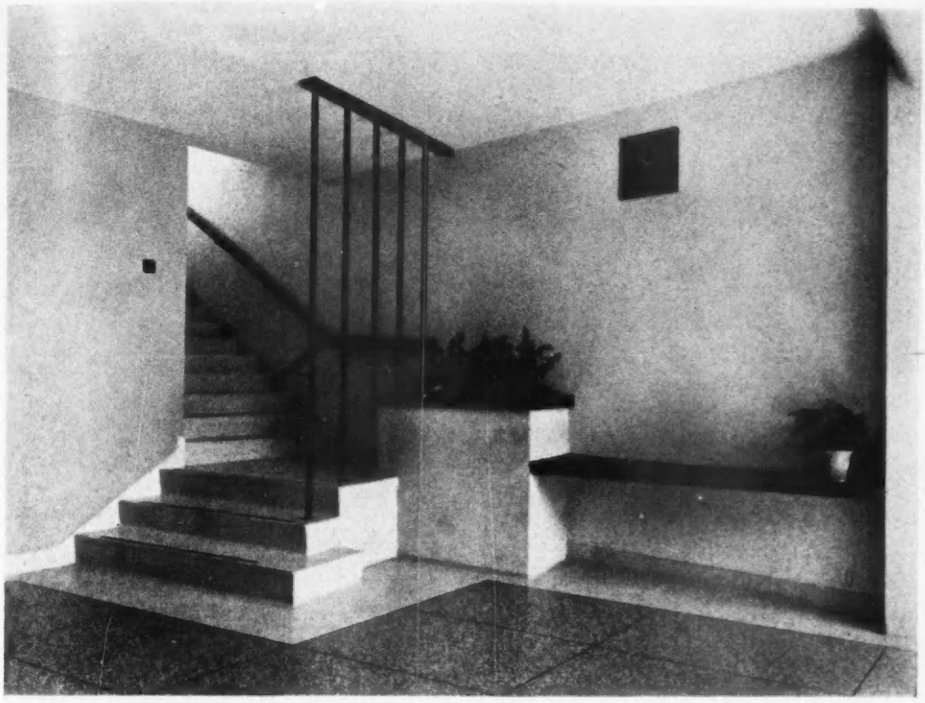


Detail of entrance hall.



Detail of entrance. The side wall is painted red and this colour is continued in the entrance hall. Similarly, the stone wing wall on the right and the canopy roof are continued into the hall. Entrance door and enquiry counter are of Burma teak. Flower box constructed of knapped flint.


Reservoir
Cast Iron
SECOND FLOOR
Flat Roof
Staff Stairs
Exchange
Printing Room
Drawing Office
Auditors
Correspondence
Public Counter
Stores Control
Wages
Machines & Stationary
Engineer
General Manager
Chief Clerk
Rental Office
Upper part of workshop
Hoist
Staff Stairs
Kitchen
Servery
FIRST FLOOR
Men's Toilet
Women's Toilet
Public Stairs
Store
Wash Room
Media Room
Sterilizer Room
Innoculating Room
Canteen
Men's Cloakroom
Women's Cloakrm
Chief Chemist
Records
Laboratory
Assistant Chemist
Dark Room
SCALE OF FEET
10 0 10 20 30 40
Reservoir
Reservoir
Hoist
Workshop
Boiler Room
Staff Entrance Hall
Covered Way
Inspectors Office
Stores Office
Entrance Hall
Garage
District Superintendent
Engineer
Stores
GROUND FLOOR
Award Road



Staircase in entrance hall.

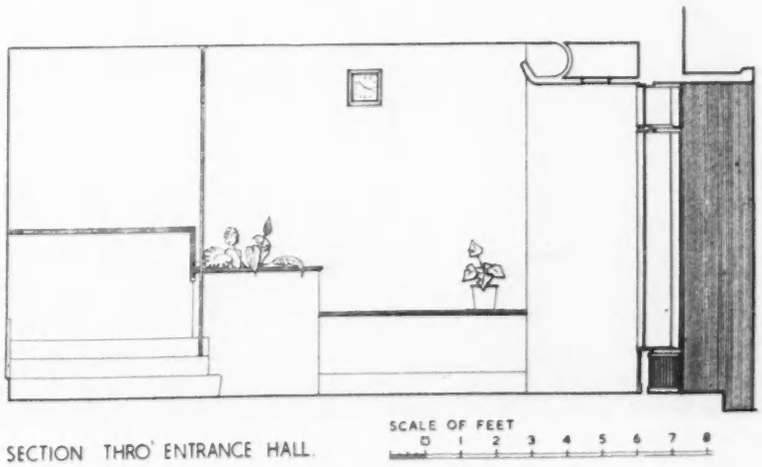
It was found that the cost of prestressed units was practically the same as that of ordinary r.c. beams if the same depth were used, but the amount of steel was, of course, very much reduced in the prestressed concrete. In addition to this, it appeared that the most economical reinforced concrete beams would be very much deeper than the most economical prestressed beams. It was possible to keep the whole construction within 15 in. thickness in prestressed concrete, while 24 in. to 30 in. would have been necessary had ordinary reinforced concrete been used.

The composite construction mentioned above has a particular advantage in conjunction with prestressed concrete. To prestress the complete beam in the factory and transport it to the site is less economical than to prestress only the lower part and cast the top *in-situ*, because the *in-situ* topping is much cheaper than the high-grade prestressed concrete.

To achieve the greatest possible economy, Mr. Samuely has, after prolonged research, developed a series of three standard prestressed soffits which were used on a number of buildings and which, by varying the distance between the beams and the depths, can be adapted to any condition.

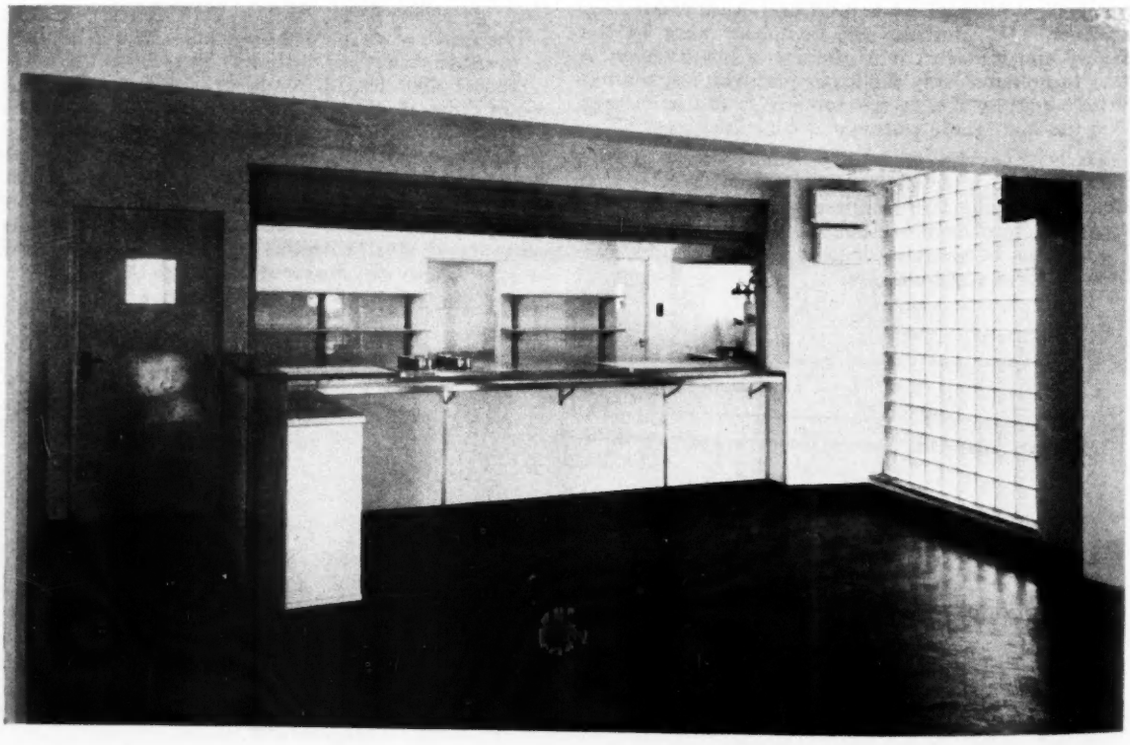
In the case of the Alderney Waterworks, beams were formed at 6 ft. 9 in. centres with 1 ft. 10¼ in. precast prestressed soffit to the beam. The soffit beam units are hoisted into position and temporarily supported until the top slab is cast and hardened. The upper precast side units forming part of the beams and replacing side shuttering are bedded in cement mortar upon the outer edge of the soffit units and held in position with bolts threaded through the tubular spacer units. The floor troughs are placed between the beams and rest upon the top of the precast side units and are finished with 1½ in. concrete topping reinforced with light mesh.

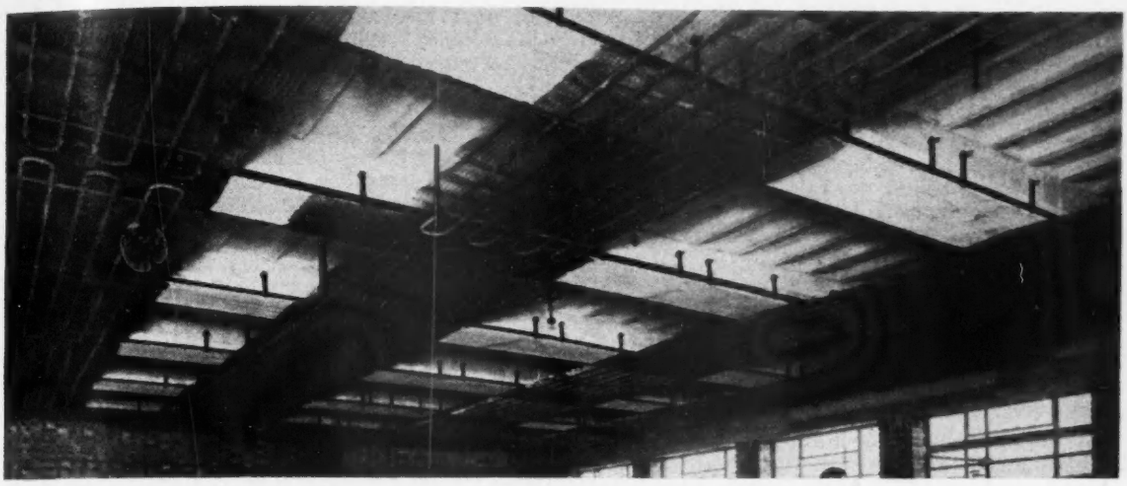
The depth of the precast elements is kept as shallow as possible, but their thickness is seldom less than 1/40th of their length, for beyond this handling becomes difficult and breakage is more liable to occur. For this reason floor slabs even 2 in. thick cannot be made longer than 6 ft. In order to overcome this limitation, special shapes have been developed which can be made thinner yet still able to retain sufficient strength for carrying live loads while *in-situ* topping is being placed, also the handling of members is facilitated by the same development. Trough units, when



SECTION THRO' ENTRANCE HALL.

The canteen. Below : Canteen serving counter.



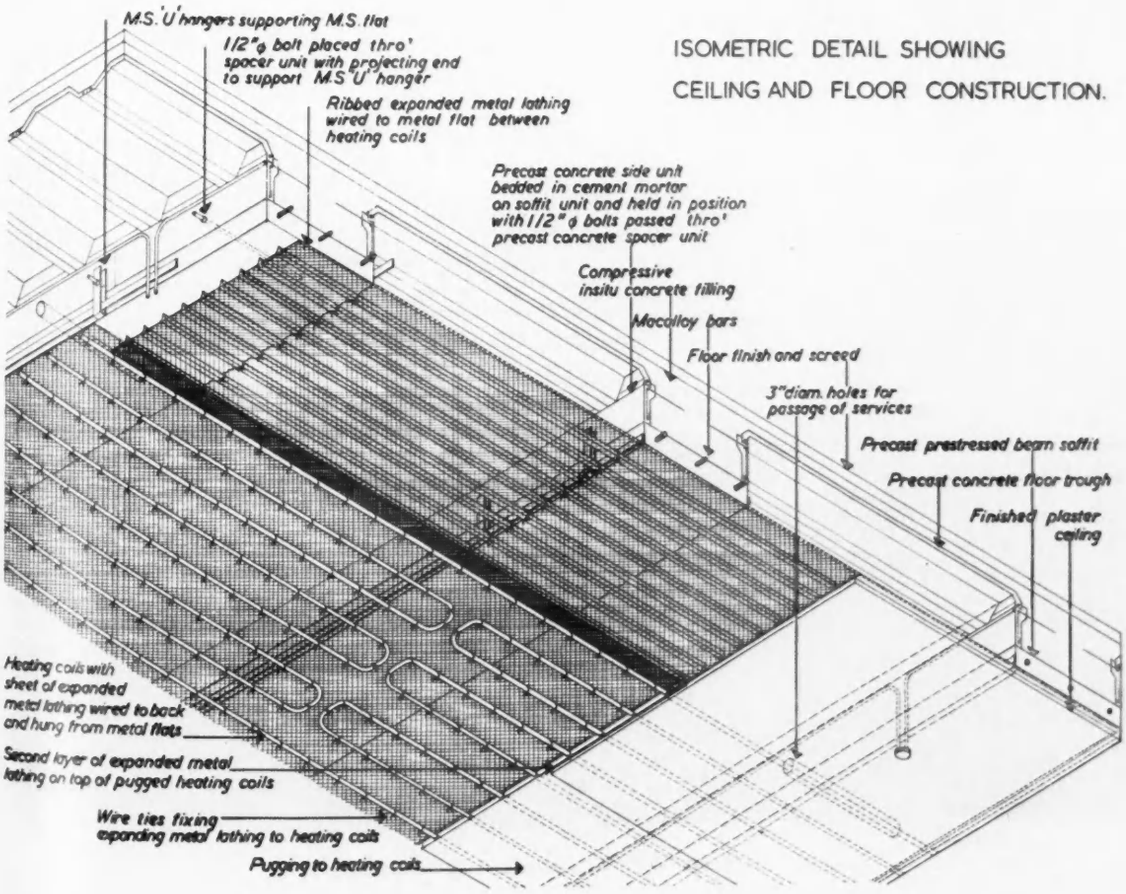


Progress photograph of laboratory showing second-floor level with heating panels suspended from mild steel flats bolted to prestressed beams. Beams are holed for passage of services.

constructed with a lip to the bottom edge and reinforced here with a continuous mild steel bar, become particularly rigid, even though the average thickness of concrete is only 1 in.

The beam soffit units themselves can be produced in various ways. They may be pre-tensioned or post-tensioned in the factory or they may be post-tensioned at the site. In the latter case they may be produced in short lengths rather than one continuous length. Generally, it was found that the post-tensioning at the site becomes useful only with lengths greater than 40 ft., and factory prestressing was given preference.

No general ruling can be given as to which method is really the cheaper, but in this particular case the cheapest tender received was one using the Lee McCall method. This system uses bars rather than high tensile wires and these bars, varying from $\frac{1}{2}$ in. to $1\frac{1}{8}$ in. in diameter, are made of a special steel alloy (MacAlloy) having an ultimate tensile stress of about 70 tons. Compared with other methods using high tensile


ISOMETRIC DETAIL SHOWING
CEILING AND FLOOR CONSTRUCTION.
M.S. 'U' hangers supporting M.S. flat
1/2"ϕ bolt placed thro' spacer unit with projecting end to support M.S. 'U' hanger
Ribbed expanded metal lathing wired to metal flat between heating coils
Precast concrete side unit bedded in cement mortar on soffit unit and held in position with 1/2"ϕ bolts passed thro' precast concrete spacer unit
Compressive insitu concrete filling
Macalloy bars
Floor finish and screed
3"diam. holes for passage of services
Precast prestressed beam soffit
Precast concrete floor trough
Finished plaster ceiling
Heating coils with sheet of expanded metal lathing wired to back and hung from metal flats
Second layer of expanded metal lathing on top of pugged heating coils
Wire ties fixing expanding metal lathing to heating coils
Pugging to heating coils

wire a greater amount of steel is required, but the labour is much less, partly due to the fact that one bar is equivalent to many wires, and partly due to the stressing being much simpler than with other methods.

The question of the working stress in prestressed concrete is still very undecided, and no definite Codes of Practice have been published. While very often a working stress of a little over half the ultimate stress is adopted, the ruling given by Mr. Samuely was that a factor of safety of 2.25 for the ultimate stress and 1.6 on the one per cent. proof stress had to be adhered to.

Heating.—Heating constituted a special problem, and it was decided that a system dependent upon radiators would not permit sufficient flexibility of layout. The solution was to use an overall heating system, and it was ultimately decided that a ceiling panel system best supplied the needs of the project.

In order to support the heating coils, the bolts in the beam holding the side units were made longer than normally required, and bent metal angles were bolted to them. Running parallel to the beams and supported on the metal angles, metal flats were attached, to which were wired the metal lathing and heating coils. Expanded metal lathing was placed behind the heating coils and, after fixing the latter, the coils were plugged with plaster. A further layer of metal lathing was placed over this and the whole then plastered.

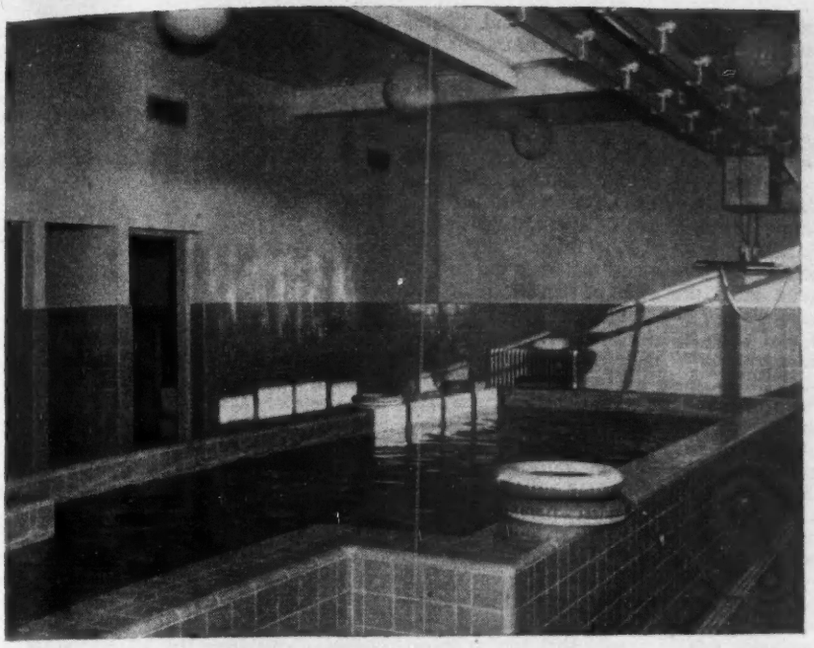
External Facings.—The lower storey of the building is faced with blue engineering bricks in solid work up to first-floor level with cavity construction on the upper floors which are faced with a buff local brick. The mortar joints are coloured to match the brickwork.

Precast stone frames surround the central windows on the first and second floors. The main entrance canopy and side wings are faced with stone which is carried through into the inner hall. Following is a list of the sub-contractors :—

Runnymede Rubber Co., rubber flooring ; Benham and Sons, Ltd., kitchen equipment : W. N. Froy and Sons, Ltd., sanitary fittings and ironmongery ; Crittall Mfg. Co., Ltd., metal windows and metal door frames ; Southern Electricity Board, electrical installation ; A. Cristofoli and Sons, terrazzo flooring ; Sykes and Son (Poole), Ltd., facing bricks ; Dennison, Kett and Co., Ltd., metal shutters : David Chaston, Ltd., prestressed concrete beams; Southern Gas Board, gas installation ; Norris Warming Co., Ltd., panel heating, hot water and oil firing equipment ; Goodlass Wall and Co., paints.

OFFICES AT THE ALDERNEY WATERWORKS, BOURNEMOUTH

View showing floor construction at first-floor level.



Interior, showing travelling gantry to assist less able patients and, above door, grilles through which warm air is discharged to stabilise fluctuations of temperature and to prevent the formation of mist.

THERAPEUTIC POOL, FARNHAM PARK

Latest Addition to Recuperative Home

THE Slough Industrial Health Service was originated in May, 1947. Its sponsors were the Nuffield Provincial Hospitals Trust and the Nuffield Foundation and Slough Estates, Ltd., and a number of manufacturing firms both on and off the trading estate. Apart from the Recuperative Home at Farnham Park, there is the Health and Accident Clinic at the Slough Social Centre, and a mobile surgery.

At the Recuperative Home a large squash court has been equipped for remedial exercises, as well as a small gymnasium for individual treatment. There are occupational workshops, gardening and a physiotherapy department for electrical treatment and massage.

The latest addition is a unique exercising pool built above the general floor level and so designed that the attendants can give the utmost assistance with the minimum of fatigue to themselves. Here under expert tuition the patients graduate from simple exercises to swimming. The buoyancy of the water enables them to use their damaged limbs with the least effort and in a very short time with the most beneficial results.

A mechanical gantry assists the less able patients. The water temperature is maintained at 98 degrees F., in order to relax the muscles perfectly for treatment.

The new building incorporates part of a disused triple garage, which occupied the site. An unusual feature of the construction is the pool walls, the design of which caters not only for the structural stability which is taken care of by using reinforced concrete in the traditional manner, but also for the prevention of sub-soil water passing into and possibly contaminating the pool, as well as leakage of water from the pool.

The waterproofing is by means of asphalt to BSS1097 in three coats which is keyed to concrete walls by means of continuous horizontal dovetailed slots 1½ in. by ¾ in. by ½ in. at 6 in. centres formed by means of strips of Celotex cut to the requisite dovetailed section and attached to the shuttering and torn out after the shuttering was struck. (Note: one use only.) The object of forming such a high degree of mechanical key was due to the fact that the asphalt has to act structurally by supporting screeding, tiling and bed. The screeding is ¾ in. thick cement and sand gauged with an accelerator (Sternson No. 340), the latter being necessary to counteract the lack of suction.

Eggshell-glazed 4 in. by 4 in. tiles by Carter and Co., Ltd., were chosen as being the most satisfactory to meet the conditions particularly of temperature, smoothness of surface, and appealing colour to which patients are very sensitive.

The building is centrally heated and incorporates a plenum system with a Biddle air heater battery and "V" grilles, augmented with direct heating, the pool chamber itself being generally maintained at a temperature of 75 degrees F. An interesting feature resulting from this circulation is the absence of mist or condensation. The bath water is indirectly heated by the main boilers via calorifier in circuit with the filtration and chemical treatment plant.

The architect was Mr. Eric S. Brown, BSc, FRICS, MInstRA, of Islington, N1, and the quantity surveyor was Mr. R. Gordon Fanshawe, FRICS, of Northwood, Middlesex. The general contractors were Messrs. Dearsley and Carter, Ltd., London, W6. The engineering services were designed and installed by Messrs. Mumford Bailey and Preston, London, EC1, and the gantry by Messrs. Bennie Lifts, Ltd., London, SE11.

A POTTERY EXHIBITION

By Boys of Bryanston School

A PLEASANT small exhibition of pottery by the boys of Bryanston School, Dorset, is now open at Heal's in Tottenham Court-road, and continues until October 17. Apart from the surprising assurance and competence of many pieces—and their modest prices (blatant advt.!)—there are grounds for welcoming this show on other counts. The overall effect suggests that the boys are wisely encouraged to exploit the natural qualities and attractions of glazes—to "let the medium speak for itself." This they handle with considerable technical skill, as far as can be judged by one who, to his great regret, has no first-hand knowledge, being a relic of the days when the important subjects were dropped on leaving Froebel kindergartens.

The simpler pieces seem therefore to come off best, such as D. Wilson's "spattered" white, and Hugh Falcon-Steward's small grey, bowls (what *does* the non-smoking family do with so many bowls, once the visiting cards and the gourds are accommodated?). But more ambitious works like Peter Barlow's large bowl decorated with a pressed repeat-pattern is most impressive, somehow suggesting Persian ware, perhaps by its colour.

Raymond Wyatt shows two nice decorated dishes, of which I preferred the crab one to the butterfly, for the rather obvious reason that the medium imparts a rather "armoured" look proper to the one but not the other. The fish-dish by Alister Brass would hold its own in any company. Sense of colour and texture shown is perhaps better than that of form—or rather the latter is generally more tentative, though W. Smith's fashionably "hour-glass" beaker suggests that at least he knows what's going on in ceramics outside school.

There were other things I liked without needing to make any allowances for the youth of their makers. One *very* small grouse—surely exhibits ought to be labelled by 3 p.m. on an opening-day? One would like to mention names of people who are of an age when it is pleasant and encouraging to see oneself in print, but it is a little hard on rushed critics, and on busy department managers, to have to ferret them out in a single-copy catalogue. And it would have been nice if someone from the school could have been present, at least on the first day, if only to answer the questions and receive the congratulations of humble critics who write about such things, like

BASIL MARRIOTT.

FLUCTUATIONS CLAUSE

London Arbitration on Point Arising from RIBA Standard Form of Contract

THE following is taken from the current Information Service of the London Master Builders' Association:

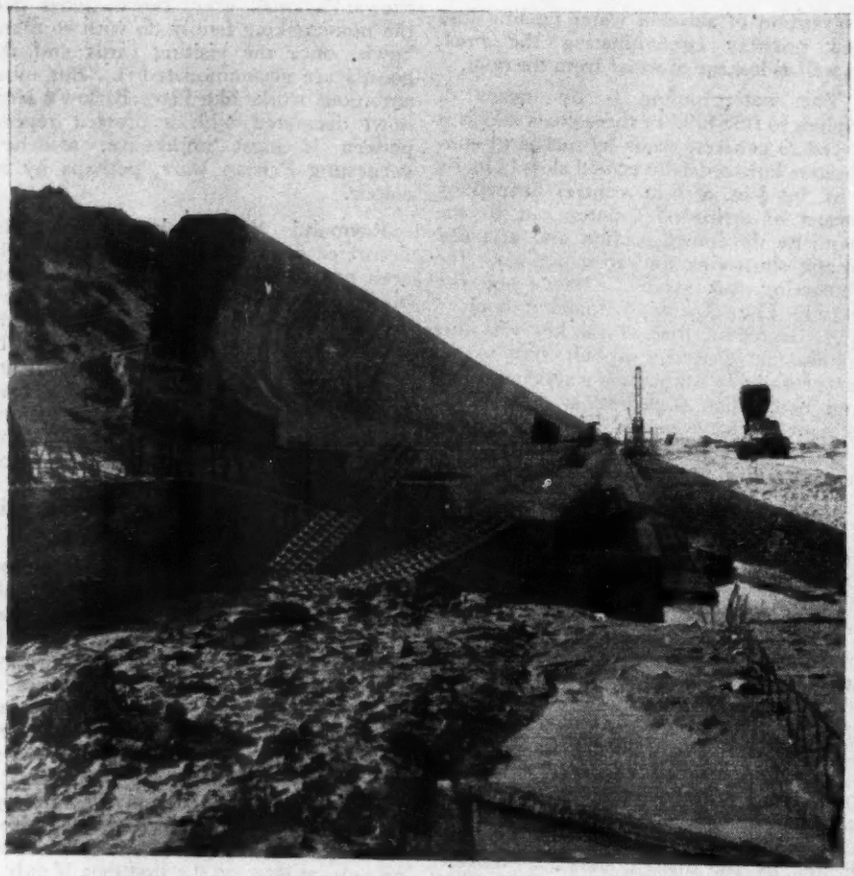
A recent arbitration between a member and a local authority, in which the Association assisted the member in the submission of his case, was concerned *inter alia* with the interpretation of the penultimate paragraph of clause 25(A), the Fluctuations Clause, of the RIBA Standard Form of Contract (where quantities form part of the contract), specially adapted for the use of local authorities; this paragraph states that " the contractor shall within a reasonable time give written notice to the architect of any of the events referred to in paragraphs (b) or (d) of sub-clause (i) of this condition or any increase or decrease in the price of any of the materials or goods specified in the list attached to the bills of quantities. . . ."

The contract was to construct 24 three-storey flats. Work began on October 2, 1948; the work reached practical completion in July, 1950; the period of final measurement ended in October, 1950, and the defects liability period in January, 1951. The contractor claimed under clause 25(A) reimbursement for the increases in labour and materials that had occurred since the date of tender. The Borough Council refused this claim on the ground that the penultimate paragraph of clause 25(A) required written notice of increases to be given and alleged that it was in this respect the contractor had failed to fulfil his contractual obligations.

The arbitrator found that the question of increased costs of materials and labour was uppermost in the claimants' mind and that they wished to have a direction from the respondents, through their appropriate officer, as to how the matter was to be dealt with; that the respondents' intention was to meet any *bona fide* increased costs; that increases in labour and materials did in fact occur after the date of tender; that the claimants did not comply with clause 25(A) in that they did not give written notice to the respondents' appropriate officer of the increases in rates of labour and materials which occurred after the date of tender and before completion of the work.

On these findings the arbitrator decided that while there was an obligation on the claimants under clause 25(A) to give written notice to the architect of increases or decreases in the cost of labour and materials, the performance of this obligation was not a condition precedent to the payment of the increases or decreases. He further stated that the purpose of the obligation on the contractor was to ensure that the architect was kept informed of the increases or decreases but that if it was intended to make that obligation a condition precedent to payment then it must be done by an addition to the contract.

He also observed, and this should be particularly noted by contractors, that it was open to the respondents in the present arbitration to claim damages as compensation for the breach of the claimants' obligation under the penultimate paragraph of clause 25(A) though no such claim had been made. The arbitrator therefore awarded the claimants the amount of the increased costs properly incurred under clause 25(A) of the contract.



EAST COAST SEA DEFENCES.—Good progress is being made on sea defence works on the East Coast, following last January's disastrous floods. Work is seen here in progress on the concrete sea wall at Sea Palling, Norfolk, which when completed will stretch from Eccles to Winterton on a part of the coast where the sea broke through the sand dunes.

HOUSING ALLOCATIONS AGAIN?

[From A Correspondent]

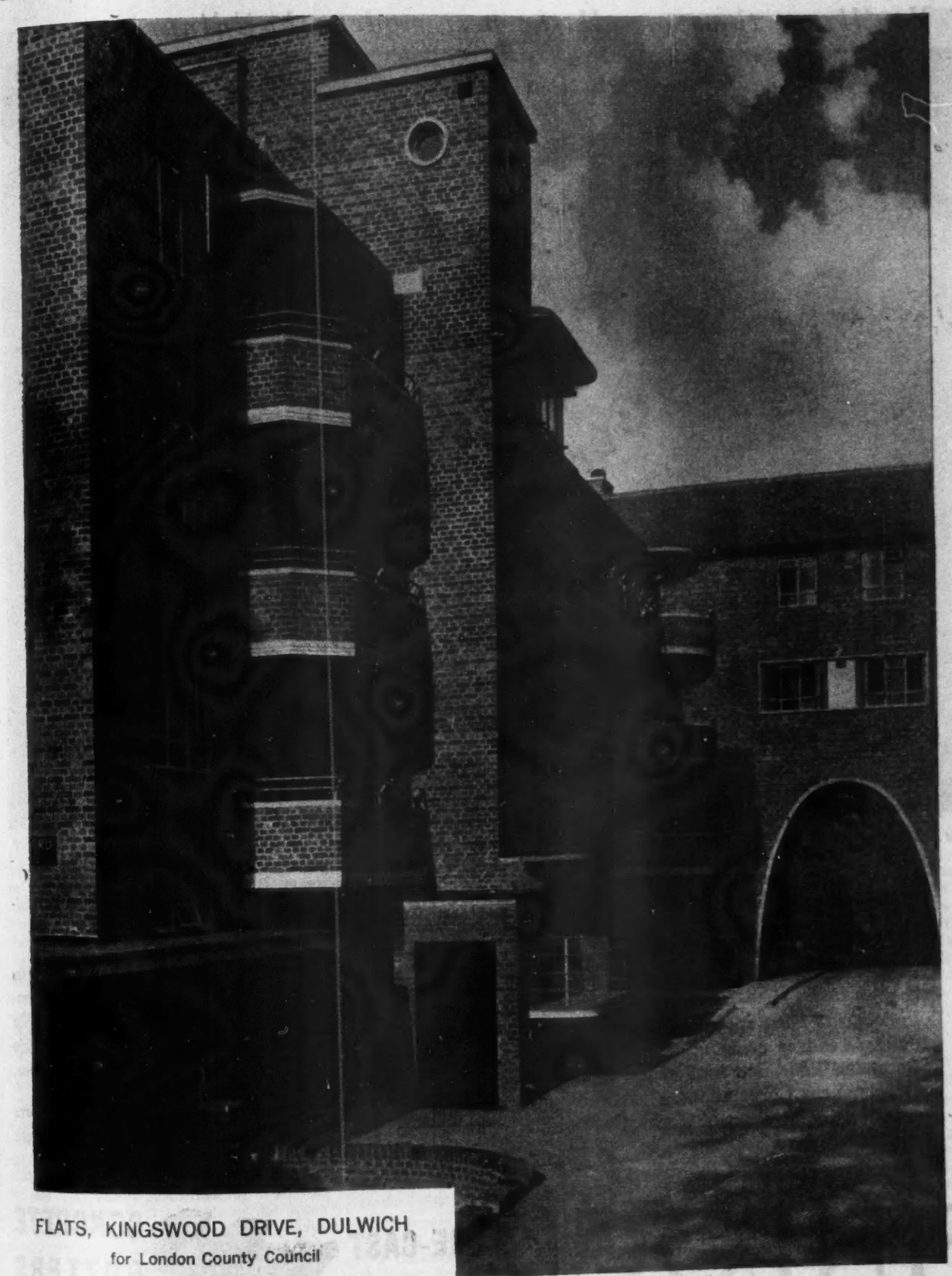
THE brick famine may be responsible for persistent rumours that the system of housing allocations to local authorities is to be reintroduced by the Ministry of Housing and Local Government. The Ministry has consistently stated that what is required is completed houses, and a policy of restriction aimed to secure an increase in the numbers completed rather than in the amount of work in progress, which represents unremunerative capital outlay, has clearly much to commend it from the local authorities' point of view.

If restrictions are again introduced, it is interesting to speculate what form they will take and what the effects will be. To be effective, rationing must have regard to the total number of houses being built in a particular area and not merely to those in course of erection for the local authority. It might, therefore, be that any system of control would involve a return to the old four-to-one or some other ratio of Council to private enterprise housing, but it by no means follows that the present administration will wish to introduce so detailed a restriction, and it is at least equally probable that private enterprise will continue to be given a free hand. Should this be so, then it is those local authorities with a poor completion record but with a number of houses under erection which might find it difficult to secure additional approvals from the Ministry—at all events for brick-built houses: for the erection of the non-traditional or " new tradition " type the position may be easier.

In relation to private enterprise housing, the question of finance is not unimportant. One may hope for some reduction in building society and local authority interest charges following upon the recent fall in the bank rate, but no such reductions have been announced so far. A slowing up of council housing would not necessarily mean a recession in the building industry, though this is a possibility that must not be overlooked either by builders or by building operatives claiming further wage increases. A falling off of demand would of itself tend to force prices down, but a fillip would be given to housing repairs and to the improvement of existing privately owned houses. So long as people continue to be inadequately or unsatisfactorily housed there will be work for the builder to do, but present indications are that the difficulties with which he has had to contend in these post-war years have not yet been completely surmounted.

Merstham LCC Estate Ceremony

The completion of the 1,000th dwelling at the LCC's new dormitory suburb at Merstham, Surrey, was marked, on September 29, by a tree-planting ceremony, performed by Mr. A. Reginald Stamp, chairman of the LCC's housing committee, and a luncheon at the Reigate Hill Hotel, at which Mr. A. J. Hill, a director of Taylor Woodrow, Ltd., the main contractors, presided.



FLATS, KINGSWOOD DRIVE, DULWICH,
for London County Council

Director of Housing and Valuer: Cyril H. Walker, C.B.E., M.C., F.R.I.C.S. Housing Architect: S. Pinfold, A.R.I.B.A.

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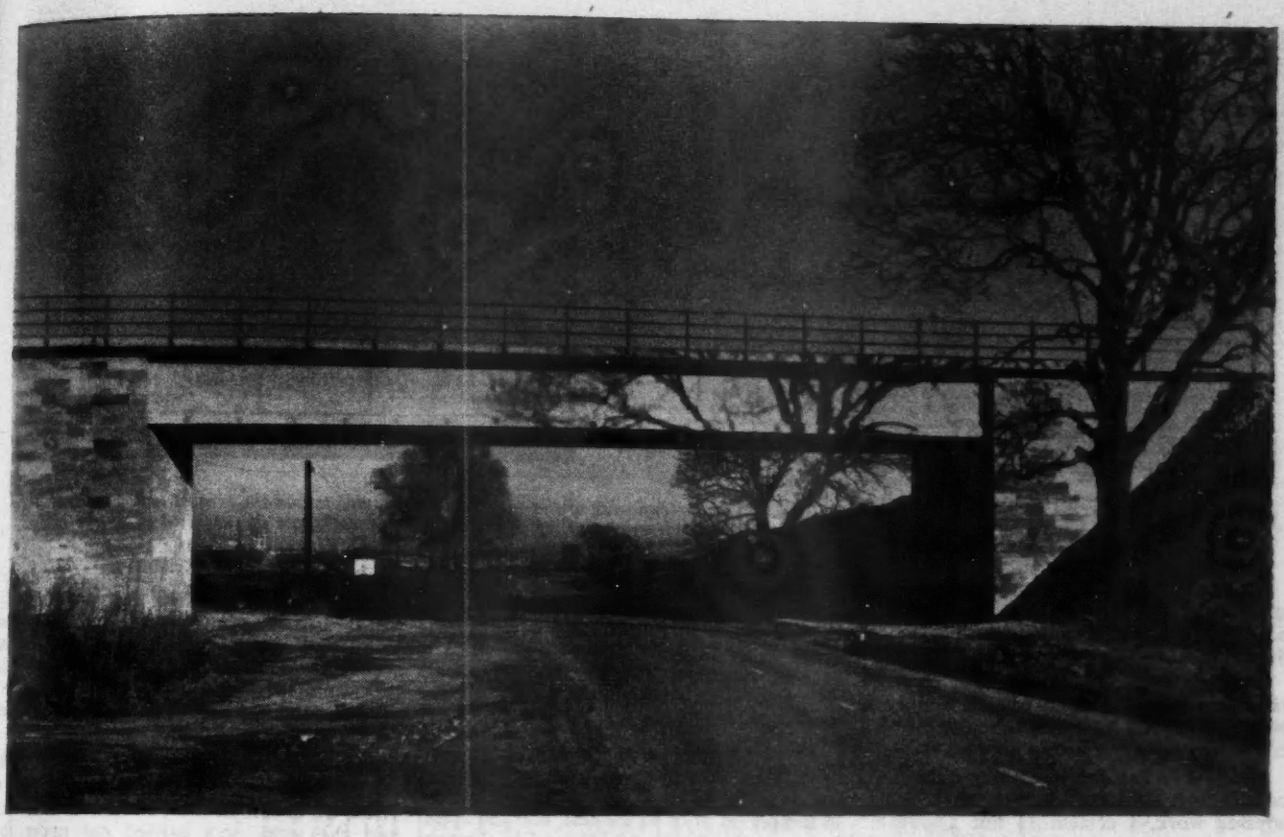


The completed bridge.

A PRESTRESSED CONCRETE COMBINED RAILWAY AND CONVEYOR BRIDGE

For the National Coal Board

A SEVENTY-FOUR foot span combined railway and conveyor bridge in prestressed concrete has been constructed for the East Midlands Division of the National Coal Board in connection with the construction of a modern colliery at Calverton, Nottinghamshire.

The layout of the colliery is such that the winding shafts are separated from the coal preparation plant by an existing roadway and it was therefore necessary that there should be a railway bridge to connect the two and it was also necessary to transport coal and refuse between the pithead and the coal preparation plant.

The planning authority would not permit a separate overhead conveyor structure and it was, therefore, decided to try to utilise the space between the deck and soffit of the bridge to accommodate the conveyors. To do this a minimum headroom of 5 ft. was required between the underside of the upper (railway) deck and the lower floor which would carry the conveyors. The design was, therefore, required to attain a minimum thickness of railway deck and conveyor floor.

The Ministry of Transport headroom requirement of 16 ft. 6 in. determined the minimum height of the bridge soffit, while to avoid steep rail gradients the level of the deck had also to be kept within certain limits. A further consideration was the need to ensure the minimum interruption to traffic using the road beneath during construction.

The bridge has two precast, prestressed girders placed parallel at 16 ft. 8 in. centres. Spanning between the girders there is an upper deck to carry the railway and a lower floor to carry the conveyors. The underside of the lower floor forms the soffit of the bridge. Prestressing was carried out on the Freyssinet system throughout.

The abutments are of mass concrete faced with mottled Alton stone and are sited on the colliery shaft pillar so that the customary provision for the jacking of bridge foundations in mining areas was not required.

The maximum permissible live load on the bridge is 104 tons. The weight of the coal and refuse conveyors are 135 lb. per foot run and 115 lb. per foot run respectively and the maximum loads on the coal and refuse conveyors at any one time for the span of the bridge are 4.46 tons and 3.8 tons respectively. Provision for deflection and expansion was made by means of Freyssinet-type hinges at the girder bearings.

Construction.—The two main girders were 77 ft. long overall and 5 ft. 9 in. deep with a web thickness of 4 in. at the centre of the span increasing to 7 in. at the ends and a camber of 2 in. Each girder was precast in three sections, the end sections weighing 5¼ tons each and the centre sections 8¼ tons each.

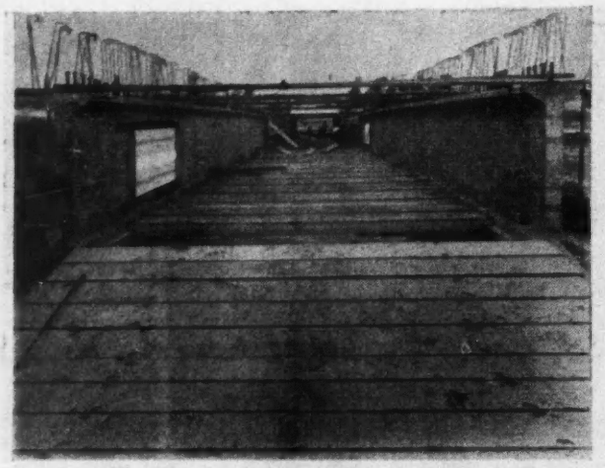
Lifting hooks were incorporated in the precast sections so that on arrival at the site each section could be lifted into position on bearings and temporary timber towers which were ready to receive them.

Once the complete girders had been lifted into position six Freyssinet cables of twelve 0.2 in. dia. wires were threaded through ducts which had been formed in the units during casting by using "Ductube." The ¼-in. joints between the sections of the girders were filled with a dry mortar of cement and sand in equal proportions. Stressing was carried out from both ends of each beam and after stressing the cables and ducts were grouted under pressure.

The conveyor floor was then constructed. This was formed mainly of hollow precast units spanning between the girders with precast concrete channel units at 4 ft. 6 in. centres to accommodate the transverse cables which had plastic sheathing. The hollow channels were then filled with *in situ* concrete. Longitudinal sheathed cables were located in the 2 in. concrete screed on top of the precast units and anchored in *in situ* strips between the girders over the bearings and thus afford considerable assistance to the main girders.

The transverse cables were stressed up first thus forming the main beams and the lower (conveyor) floor into a monolithic whole. The longitudinal cables were then stressed to provide sufficient prestress in the beams and lower floor to carry the upper (railway) deck and the live load.

The top deck was cast *in situ*. The transverse cables, sheathed in plastic, were placed before concreting began and were looped so that both ends of each cable were anchored on the same side of the bridge and cables were anchored alternately on opposite sides of the bridge. The loop of each cable was bared and the wire separated to bond with the concrete and stressing was carried out from both ends of each cable. This slab rested on hinged supports to avoid transmitting bending moments to the web of the main beams.



The lower deck of the bridge (left) under construction. The post-tensioning of the main girders is complete and the precast hollow units of the lower deck can be seen in position in the foreground. Right : Arrangement of transverse looped cables in the upper deck of the bridge.

Finally the cantilever footways were constructed. The reinforcement for these had been left protruding from the top flange of the main beams.

On the approaches to the bridge the conveyors run below ground and the conveyor-housing roof is a 9-in. prestressed slab which carries the railway running above.

Concrete.—The concrete mixes used in the construction of the bridge were: Prestressed work, 1 cement: 1½ fine aggregate: 3 coarse aggregate; reinforced concrete work, 1 cement: 2½ fine aggregate: 3¼ coarse aggregate; topping on the conveyor deck and bridge, 1 cement: 3 fine aggregate. All batching was by weight and ordinary Portland cement was used exclusively. All concrete was vibrated, *in situ* concrete being vibrated both internally and externally at the same time.

A minimum crushing strength of 4,000 lb. per sq. in. was required in the concrete at the time of stressing and a minimum of 6,000 lb. per sq. in. before the bridge was used. Cube tests gave results in excess of the required minimum strengths.

The maximum design compression due to the train load is 1,472 lb. per sq. in. The design does not permit tension to develop in the concrete under any condition of loading.

Preliminary Works Test.—A specimen section of railway deck was cast and tested to destruction at works, under the supervision of the Building Research Station. The deck specimen, which was 5 ft. 4 in. wide and 9 in. deep, was supported on a clear span of 16 ft. 3 in.

At various stages, arrangements were made to record (a) the strain in the concrete resulting from prestressing, creep and shrinkage in the period prior to the test, and the application of the increments of load in the test; and (b) the deflection of the slab during prestressing and in the loading test.

For the loading test, the slab was loaded in increments of four tons, at each of which strain and deflection readings were taken. After the maximum load was reached, the load was removed and re-applied.

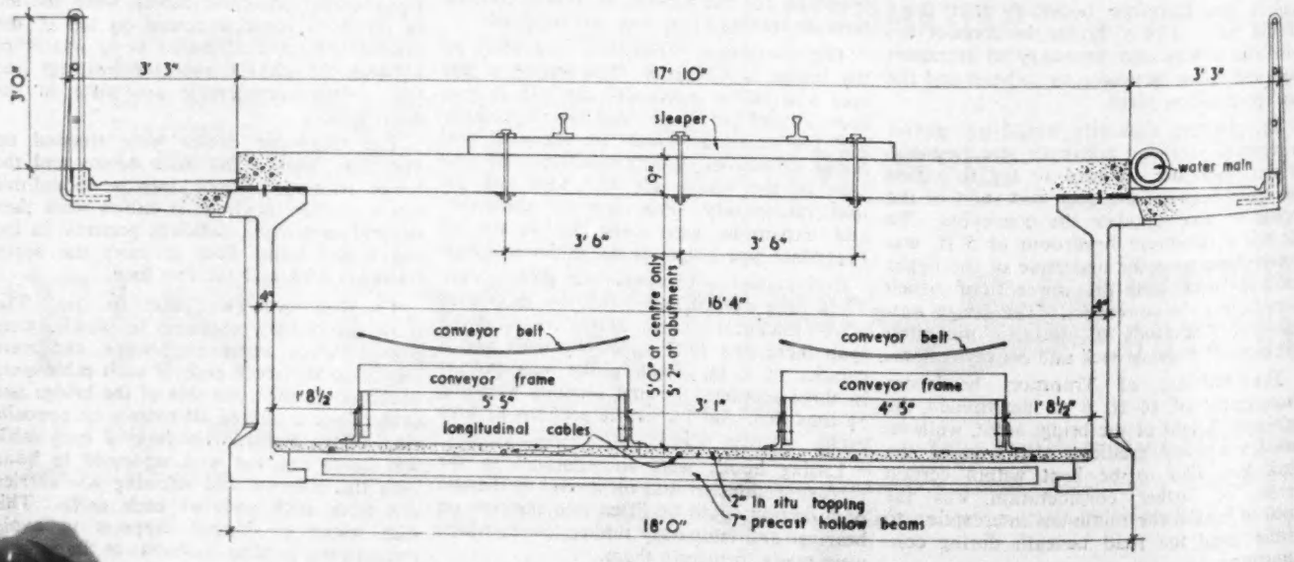
It is interesting to note, briefly, that an upward deflection of ¼ in. was induced at post-tensioning and that the deflection under the simulated train load was approximately 3/16 in. leaving a net deflection of approximately 1/16 in. The upward deflection induced at post-tensioning is used as a two-way fall to drain the railway deck.

Whereas the maximum operational load for the test specimen comprised two seven-ton wheel loads, the concrete actually failed in compression under a load of 36.8 tons, at which time the deflection was approximately 2¼ in. After removal of this load, the residual downward deflection at the centre was ¼ in. The second application of this maximum load gave a net central deflection of 3 in. and a final residual deflection after removal of the load of ⅝ in.

The scheme was commissioned by Mr. A. Hill, OBE, Area General Manager, No. 6 Area, on behalf of the National Coal Board, and the work was carried out under the general direction of the Divisional Architect, Mr. H. S. Barnett, LRIBA. The engineer was Mr. H. C. Griffiths, MIStructE, in collaboration with the Pre-Stressed Concrete Co., Ltd. Mr. F. T. Sudbury, ARIBA, was the Senior Architect.

The contractors were Fletcher and Co. (Contractors), Ltd., of Mansfield, whose work included the construction of the abutments and stone facing, the erection of the main girders and precast concrete flooring units, and the *in situ* concrete to the prestressed railway deck.

The precast bridge girders and the precast flooring units were cast at the Manchester works of Matthews and Mumby, Ltd., who also supplied and fixed the prestressing cables and carried out all post-tensioning on site.



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THE BURDEN OF STATE-SUBSIDISED HOUSING

Suggestions for Extending the Range of Private Building

By Harold Ford

MUCH concern continues to be felt in financial quarters at the increasing annual load upon the Exchequer, resulting from the subsidising of State housing.

During the period of shortages and early post-war recovery, and particularly during the era of Socialist control of the Government, it was difficult to see quite how far this policy was necessary or would be allowed to go, and even the present Government, who have undoubtedly greatly assisted in the building of private houses, seem to regard this problem together with the consideration and reform of the Rent Restriction Acts as "hot coals."

In the case of the Rent Restriction Acts, this inaction is leading to chaos, which the longer it is left the greater will be the difficulty of producing order.

With newly built houses, having regard to the achievements of the industry under Mr. Macmillan's guidance in the current year, which is likely to reach—if not exceed—the expected 300,000 mark, it is appropriate that consideration should be given to this subject with a view to meeting the problems that are likely to arise, and to ensure a continuity of production at price levels and in the form that can be afforded by the artisan class, who are those mainly in receipt of or will otherwise be potential receivers of Government subsidy in the form of State-built houses.

The annual Government subsidy on a council house is £26 14s., which together with the local authority's statutory contribution of £8 18s., brings the total annual subsidy to £35 12s. It has been stated on good authority that the capital value of the direct Government subsidy is at least £700, and in Parliament it has been suggested that a cash subsidy of £300 should be granted to every purchaser of a new house, thereby saving the Government another £400 by so doing.

While an excellent case can, of course, be put up for this, I consider that it is not good in principle to give something for nothing, but it is extremely desirable to encourage thrift in proportion to the effort that is made, and if in so doing the Government can be relieved of this stupendous burden which is mounting up from the sources described, then most certainly something must be done about it without further delay.

CHANGING THE RATIO

The economics of the problem are simple. At the moment private enterprise is building houses at approximately a quarter to a fifth of the annual total of local authority houses. The present material and labour situation does not, in the main, permit a further increase in the production of houses as a whole, except at the expense of other sections of building, which would have to suffer if materials were directed solely to that source. It follows, therefore, that if more private houses are to be built, there will have to be a reduction in the number of State houses and conversely a reduction in the number of State houses will permit the building of a greater number of private houses.

At present, the demand for private houses remains high in the majority of price ranges, but since the greatest demand is for houses for the lower income groups, it can be but a matter of time before the demand for the larger and more expensive types of house is substantially met and the big problem will be to meet the demand for the smaller houses at prices within the income of the potential owners.

The average council house to-day is costing in the region of £1,600, and in order to give the necessary basic accommodation at post-war standards, I think that a ceiling figure for the popular house must be placed at about £1,500 (this may be increased by £100 to £150 in the Southern counties); the purpose of this ceiling being to produce a house which is within the range of the individual earning £10 a week, and who does not wish to contribute more than 20 per cent. of his income to the provision of accommodation.

To purchase a £1,500 house under present circumstances involves the purchaser finding from £150, with the additional cost of an insurance guarantee, to £300, without such a guarantee, and still subject to a satisfactory status inquiry. The amount of deposit required is beyond the vast majority of the individuals in the income group named, who would be willing to buy a house, if they could afford it. It is therefore necessary to make it possible for them to acquire a house with a deposit of, say, £100; this would leave a balance of £1,400 which, assuming it could all be borrowed on standard building society terms, would result in the following weekly payments:—

20 years at £2 5s. per week.

25 years at £1 15s. per week.

To which must be added rates, say 8s. a week, and perhaps ground rent, at, say, £7 10s. a year (3s. a week).

Now not all building societies advance loans on a 25-year period, and no building society, to my knowledge, advances on 30 years, though if they did a logical reduction in the weekly rate of repayment would appear to indicate that this should cost 28s. a week on the sum named, and the problem, therefore, resolves itself into one of how to maintain the full balance of house building, at the same time encouraging the privately built house, and reducing the current annual burden of subsidies.

This matter is summed up under the following headings:—

SUMMARY OF AIMS

1. To reduce Government subsidy on housing and the continuing and rising annual indebtedness resulting therefrom.

2. To encourage house ownership.

3. To limit future housing subsidies to cases of need only.

4. To discourage application for occupation of State-subsidised housing by the alternative of the ability to purchase private houses on terms favourably related to group incomes.

METHOD OF OPERATION

1. To encourage the building of housing to approved standards for sale by private enterprise builders, willing to cater for the approved income group.

2. The purchasing and developing of land where necessary by local authorities, where a shortage exists of suitable land in the hands of builders, and the leasing of this on a 99-year basis under an approved scheme.

3. It would be necessary that a condition of the scheme would be dependent upon the builder undertaking to build houses complying with the requirements of National House-Builders' Registration Council's scheme, which provides for certification on completion and progress inspections by competent officers and a two-year guarantee.

4. The houses qualifying should not exceed £2,000 or other approved figure, designed to accommodate the income groups aimed at.

5. The local authority to approve the specification and the price per foot super as at present.

6. Agreement to be made with the building societies by the Government to support a scheme whereby the purchaser would be required to find only the first £100 as a deposit on a house of value, say, £1,500, or £150 on a 30-year period in the case of a house valued at £1,500 to £2,000, in consideration of which the Government would agree to apply half the amount that would be saved from the annual subsidy, as at present costing nearly £40 per annum, that is at the rate of £20 per annum for the first half of the loan period, i.e., for the first 15-year period. The effect of this would be to contribute over a 15-year period, the sum of some £300 at the rate of approximately 8s. per week, in a direct relationship to the contribution and effort of the purchaser himself, so that a 30-year purchase could be effected by the purchaser on terms which would enable him for the first 15 years of his mortgage term to reduce his outgoings to about 30s. to 31s. per week, and in the second 15 years to 38s. to 39s. per week, which is within the 20 per cent. of total income aimed at. Alternatively, the Government could guarantee to the building societies some such capital sum that could be remitted to them in instalments as the mortgage is redeemed, thereby holding down the total weekly outgoings within the necessary limits.

7. In the event of the lack of building society support for such a scheme, it is suggested that a Government-owned privately run organisation, on the lines of the Industrial and General Finance Corporation, could be formed to finance this scheme.

CONCLUSION

1. Future Exchequer indebtedness for subsidisation would be greatly reduced.

2. A corresponding reduction would take place in State housing as approved houses were built in greater numbers to balance the total housing output.

3. Only by such a long-term policy of encouragement of private house building will building costs be held down and most probably reduced.

4. Local authorities at the end of the period of the lease would end up with attractive groups of property which would have been subsidised at the minimum possible expense, and which would represent a very substantial and valuable national asset on reversion.

Engineering Lectures

A series of post-graduate lectures for the session 1953-54 will be held at the Department of Civil and Mechanical Engineering, Battersea Polytechnic, SW11. Enrolment forms may be obtained from the Secretary.

SMOKE ABATEMENT

Ways and Means of Preventing Air Pollution

FOUR HUNDRED AND FIFTY members and delegates, mainly from local authorities, Government departments and the fuel and power industries, attended the 20th annual conference of the National Smoke Abatement Society, which was opened in Glasgow by the Lord Provost on September 30.

This was the first national air pollution conference since the great London "smog" disaster of December last, which resulted in 4,000 deaths. Appropriately, the most important session, the Des Voeux Memorial Lecture, was this year on "Air Pollution in Relation to Preventive Medicine," by the Chief Medical Officer, Ministry of Health, Sir John Charles.

Dr. J. A. Scott, Medical Officer of Health, London County Council, spoke on the health aspects of the London "smog," and Dr. A. Parker, Director of the Fuel Research Station, described how weather conditions and air pollution combined to make it so deadly.

Appeal to Local Authorities

In his retiring presidential address, ALDERMAN PROFESSOR F. E. TYLECOTE, MD, of Manchester, appealed to local authorities to join more actively in the campaign against smoke. "We are compelled," he said, "to argue from past experience and remember that the lead has always come from the local authorities and never from Whitehall, which has consistently refused local authorities' requests."

But, he pointed out, while certain large authorities were really efficient in their drive against smoke, there were others, both large and small, which did not take this duty seriously. Some argued that they had no smoke, forgetting that smoke knows no bounds, and others were in the power of large local industrial leaders who were antagonistic—some of whom, strange as it may seem, were still imbued with the idea that more smoke meant full employment.

Professor Tylecote urged local authorities to set up more joint committees, to employ smoke inspectors with good qualifications, and to organise more "schools for stokers."

SIR JOHN CHARLES traced concern about Britain's smoke from the time of Charles II to the present day, and urged the need for more systematic inquiry into precisely how polluted air injured health. Much of the existing evidence, though badly assembled and intellectually unsatisfying, was disturbing. "We cannot avoid the suspicion," he said, "that 'this most excellent canopy, the air,' is for the countryman healthy and stimulating, but for the townsman 'a foul and pestilent congregation of vapours'."

He continued: "There are administrative and technical measures which, directed against atmospheric pollution on the grand scale, can yield dividends for the public health, even though we remain profoundly ignorant of the *modus operandi* of the offensive agents upon the individual citizen."

The London Fog Disaster

Three reports on the London fog disaster of December last were given on October 1. DR. J. A. SCOTT, Medical Officer of Health of the London County Council, gave figures which showed that the excess of deaths over the normal were greater than during the cholera epidemic of 1866 and the great fog of 1873. They were exceeded only by deaths during the peak week of the 1918 influenza epidemic.

"The North Sea floods aroused the practical sympathy of the country, as such disasters do," commented Dr. Scott. "The London fog cost many more lives and an untold amount of invalidity. It is time the country moved."

DR. A. PARKER, Director of the Fuel Research Station, reviewing the meteorological conditions which led to the formation of the fog, said that the pollution measuring instruments in the London area recorded a five-fold rise over the normal in both smoke and sulphur acid concentrations during the period.

Fog, he said, was a natural phenomenon, and there was no known economic method of preventing or dispersing it over a wide area. But there was no doubt, he concluded, that determined efforts could lead to an appreciable reduction in air pollution due to the use of fuels which would reduce the detrimental effects of fog in thickly populated areas.

MR. ARNOLD MARSH, General Secretary of the Society, spoke on the economic cost of fog and the difficulty of obtaining definite figures and information. It was probable that the cost of a day's fog in London was well up in the millions of pounds range, but "on the whole the industrial and commercial world is hardly conscious of what they pay out because of smoke-fog and smoke generally, largely because it is so familiar and merges into their general overheads."

In a review of smokeless zones, DR. T. MORRISON CLAYTON, Medical Officer of Health, Coventry, said that his city, which had been the first to establish a smokeless zone, was now preparing to double its size. He cited four types of area in which smokeless zones could best be developed: industrial areas with heavy pollution; war-damaged industrial areas being rebuilt; residential areas being developed; and areas of all types in the vicinity of airports.

Dr. Clayton urged that initial smokeless zones should be as large as was reasonably compatible with the weight of opposition, and in cases of difficulty it might be wise to give certain factories temporary dispensations from participating. As we advanced towards a more general concept of a smoke-free atmosphere, there would have to be co-ordination of the present separate schemes and also co-ordination of the supply of the solid smokeless fuels required.

Smokeless Fuels

A team of seven technical and marketing experts of the Solid Smokeless Fuels Federation presented two papers, one on the production and use of the different kinds of solid smokeless fuel, the other on their availability.

It was not possible, said the authors, to solve the smoke problem along the lines of burning bituminous coal in open fires, no matter how they may be designed. At present 35m. tons of coal were being used for domestic purposes. Thirty-seven million tons of solid smokeless fuel were being produced annually, but much of this was for special industrial purposes, and only 5m. tons were available for the domestic market.

Although the abolition of smoke over the whole country was desirable, there was an immediate and pressing problem for the large towns, cities and industrial areas, and attention should be concentrated on the areas of heavy pollution—Greater London, the Black Country, South Lancashire, the West Riding, and on the Clyde, Tyne and Tees.

To replace all the domestic coal in these areas would require 13m. tons of smokeless fuel, or much less if part of the coal was replaced by gas and electricity. The authors showed how it was possible to make 10m. tons of smokeless fuel available by 1957 and 15m. tons by 1962.

The concluding session, on October 2, was devoted to the efficient and smokeless combustion of fuel oil.

At the annual general meeting of the Society, which was also held on October 2, the election was announced of Sir Ernest Smith, CBE, as the new president.

City of London Move

THE COMMON COUNCIL of the City of London decided, on September 24, to seek statutory power to declare "smokeless zones" within the City and to prohibit the installation of furnaces in buildings unless they are, as far as practicable, capable of being operated continuously without emitting smoke.

CAPTAIN A. INSTONE asked if it was not possible to take additional steps in view of the approach of the fog season. He suggested a "fog defence movement to prevent the misuse of smoke." Unless action was taken the crisis would be upon them before the suggested powers could be put into force.

SIR CULLUM WELCH replied that a clause would be inserted in the next Various Powers Bill towards the end of the year. The other question must be put to the public health committee.

NEW WAGE CLAIM

Building Workers to Demand 9d. an Hour

A CLAIM for a general increase in wages of 9d. an hour is to be presented to employers in the building industry by the National Federation of Building Trades Operatives when they meet for the annual review of the industry's national agreement next January. A demand for 6d. an hour more was rejected by the Industrial Disputes Tribunal this summer, although building workers received an extra 2d. an hour in February under the sliding scale agreement which links their pay with the retail prices index.

About a fifth of the members of trade unions in the industry, it is believed, already receive the equivalent of the wage rate which is to be claimed and which would probably cost the employers £90m. a year if conceded. About a million workers are affected by the claim. The decision to present it was taken recently at a delegate meeting of the operatives' federation in York.

London Airport "Go Slow"

Nearly 500 building trade workers decided to "go slow" on Tuesday on the new construction site in the middle of the airfield at London Airport. A strike committee spokesman said that 500 men had lost two hours pay when they attended a meeting to consider the redundancy of five men. The management "refused compensation to the men and this is their form of protest." The men were visiting the sites of two other contractors on the airport to ask for similar action by their workers.

THE REDEVELOPMENT OF EAST LONDON

ABT Willing to Help "In Any Way Possible"

AN open and informal meeting was held at the Building Centre, Store-street, WC, on the evening of September 18. Called by the Association of Building Technicians, about 40 architects, surveyors, clerks of works and others were present to consider the next step in the redevelopment of East London; a document had, however, been circulated dealing with the market place at the Lansbury neighbourhood, and this became the main subject of discussion. Mr. C. D. Saunders presided.

Before the meeting concluded it was resolved that the Committee of the London branch of the Building Technicians' Union should advise the LCC of the ideas and suggestions put forward, and suggested that if a further meeting were held in Lansbury to discuss the redevelopment then the ABT would be willing to assist in any way possible.

Earlier, MR. RON MILHOUSE said he had been clerk of works for most of the building at Lansbury. He had made himself a friend of many of the people who lived there, and he saw their point of view. The market place was not the whole of the redevelopment scheme, but it was the heart and nerve centre. Little fault was found with the houses provided, but the traders who used the market place were not convinced that they had got something better than they had had in Chrisp-street. Between the main road and the market place, and in other directions, slum clearance was going on. Would this bring trade to the market place and make it a flourishing centre? There were empty shops in the market place: if the development was right those shops would be let.

A member of the audience said the market was a square on the Continental plan, and was not a success. Before anything further was done the street traders and others concerned should be made to come forward and take responsibility. They should appoint a committee to go into the thing and any decisions arrived at should be adhered to.

LCC's "Difficult Job"

MR. FORREST (LCC Planning Department) said the County Council had had a difficult job. They had to start with materials available and use bombed areas. It was not possible to consult the public on planning problems because people would not come to meetings. He had tried dozens of times. It was impossible to please everybody. If stalls were there shopkeepers complained that the stalls took their trade away, and when the stalls were put elsewhere the shopkeepers complained that nobody came to their shops. It was not the case that the planner sat in an office and did not visit the site.

MR. FOX (ABT) said he liked the Lansbury scheme very much but the market place seemed artificial and there was not room for expansion. In a street market one stall came after another and the market could keep on expanding.

MR. FORREST said the market was only a part of seven or eight neighbourhoods under the County of London Plan. A certain risk was being taken in developing only part of the neighbourhood. The usual market alongside a kerb was forced upon people, but the natural shape of a market was a rectangle, and that was almost invariably the shape in a country town.

MR. COMMON said the open market in Lansbury suffered through the weather. When he saw it the market was all but completely deserted on this account.

MR. MILHOUSE said that the covered market was amazingly successful, although it had been designed for meat and fish and was actually used for second-hand clothes, jewellery, stockings, etc.

MR. MONCRIEFE said the planning of Lansbury had been a tremendous conception. The traffic problem had been increasing and the slums getting worse every day, and this was the biggest and best attempt to do something. As to asking people what they wanted, he had tried asking housewives what they wanted in a kitchen. A woman could sometimes tell you what she did not want, but to try to give her something she thought she wanted would be fatal. It was the architect's job to design and plan, to do something new and better.

MR. PETERS (Town Planning Officer, Edmonton) said he would like the LCC to have a public meeting and discuss future developments with the people at that meeting. There had been a general interest in planning immediately after the war, but some planners had proposed things that could not be put into practice, and this had had a bad result. A planner should be primarily someone who understood other people, and realised that he was planning for them.

Advantages of Closed Markets

MR. RUBENSTEIN said open markets in London had grown up, but was the open market the best thing? In bad weather people would not go to the open market. He had seen closed markets in Nottingham, Cork and Dublin.

Another speaker said the market problem in London was not the same as in a small country town. There the market was a weekly event for farmers and others from the country around. The case of London was quite different from that.

MR. COMMON said that nearly the whole of Lansbury had been built around already existing streets. This was not planning.

MR. CARTER said that when he visited Lansbury he was thrilled. He thought of the Bull Ring in Birmingham. That was a nightmare because of the buses going round. The public must be thought of as well as the traders. The success of the market depended on it being the hub of the neighbourhood.

CAMBRIDGE FOREMEN

Talk by Mr. Woodbine Parish

THE fifth annual general meeting of the Cambridge and District Association of Builders' Foremen and Clerks of Works was held at the Cambridgeshire Technical College on September 24, under the chairmanship of Mr. W. R. Edwards. The chief speaker was Mr. D. E. Woodbine Parish, who is chairman of the national standing committee for the training of general foremen.

After congratulating the Association on reaching its fifth birthday, MR. WOODBINE PARISH emphasised that the general foreman was a fundamental part of management in the building industry. His duties lay in the organisation, direction and supervision of the work of others, and many of his problems were largely a matter of human relations.

After referring to the importance of having a background knowledge of the social and economic development of the country, he stated that in his opinion advances in building technique had outstripped management methods. At the end of each year a firm prepared a financial balance-sheet, and this might well be extended to a management balance-sheet. Men liked working for competent firms and this was a most important point in times of keen competition for labour.

Referring to the qualities of a foreman, Mr. Woodbine Parish said that these included a sound practical and theoretical knowledge of all aspects of building work, an appreciation of organisational and legal problems, moral integrity, an understanding of the loyalties affecting all concerned in building work and confidence in oneself and one's ability to see the job through. The scope of a foreman's duty extended not only to the sound organisation of the work with all that this entailed, but also an ability to manage men and an up-to-date knowledge of new methods and techniques.

Stressing the importance of personal management, he said that the foreman's function, among other things, was to put the men "in the picture," to select them carefully for the work to be done, to issue instructions with clarity and tact, and to persuade men rather than drive them. Employers to-day were no longer buying labour, they were selling employment, and this was the keynote of efficient personnel management. It was absolutely essential, he concluded, that a foreman should build up mutual respect and mutual confidence.

Earlier in the meeting, Mr. R. Odell was elected honorary secretary of the Association, and Mr. N. Johnson honorary treasurer.

An interesting programme has been arranged for the Association's autumn term, the subjects including sewage disposal, well-point dewatering, flue construction, steel, and lead paints. Membership of the Association is now close on 50.

EASTERN FEDERATION

Apprenticeship Awards

THE Eastern Federation of Building Trades Employers have now announced the winners of this year's awards of £25 each to apprentices of ability to enable them to continue an approved course of study. The awards are based on the reports of the master, the principal of the technical college and the City and Guilds Intermediate (or equivalent) examination results. The successful apprentices are:—

(a) P. A. Brown (carpenter and joiner apprentice with Harris and Andrews, of Gt. Yarmouth); (b) J. A. Burrell (carpenter and joiner apprentice with A. D. Jackson and Son (Contractors), Ltd., of Southend); (c) B. H. Law (carpenter and joiner apprentice with J. Custerson, Ltd., of Saffron Walden, Essex); (d) C. J. Marshall (bricklayer apprentice with Cubitt and Gotts, Ltd., of Ipswich); (e) R. J. Thompson (carpenter and joiner apprentice with William J. Bushby, Ltd., of Kempston, Bedford).

OBITUARY

A. L. Oldacre, AMTPI

MR. ALFRED LEONARD OLDACRE, AMTPI, chief planning officer to the Peak Park Planning Board, has died at the age of 47. In 1935 he was appointed planning officer to the Peak Joint Planning Committee of the local authorities by whom the control of the development in the district was then exercised. Derbyshire County Council became the planning authority after the war and Mr. Oldacre became area planning officer. When the Peak Park Board became responsible he was appointed the first planning officer in charge of a national park with portions in a number of counties.

CONSERVATIVE PARTY AND HOUSING POLICY

Many Resolutions on Agenda for Annual Conference

HOUSING again occupies a prominent place in the annual conference of the Conservative Party, to be held at Margate from October 7 to 10. Thirty three resolutions are down for discussion on the agenda on housing and maintenance of houses, which is more than under any other head. The subject will be debated at the conference's third session, on the morning of Friday, October 9.

Most resolutions begin by congratulating the Government on the success of their housing drive. The debate and vote on housing will take place on the motion submitted by Mr. R. Graham Page (North Islington Conservative and Unionist Association), who will move: "That this conference renews its congratulations to the Minister of Housing and Local Government on the outstanding achievement of building new houses at a rate of 300,000 a year and urges that further efforts should now be concentrated on the maintenance, improvement and conversion of existing houses especially in crowded urban areas."

A number of resolutions refer to the burden of the housing subsidies and suggest ways for encouraging home ownership. The North Cornwall Association wants "cheap money" made available for people to purchase their own houses, but Droylsden calls on the Government to implement the recommendations of the Private Enterprise Sub-Committee Report of 1944 "in the granting of an initial subsidy to the private builder."

In regard to easing the burden of the housing subsidies, the East Ealing Association urges that the subsidies should be taken into the recipients' assessment for income-tax purposes, "thereby assuring the greatest help for those with the greatest need." A resolution from Watford says that indiscriminate assistance to all council house dwellers "is morally wrong and should be discontinued, and that some other means should be found of helping those unable to afford an economic rent."

The Cost of Building

A resolution in the name of Mr. Harmar Nicholls, MP (Peterborough and North Northants Association), recommends that special attention be given to "keeping the cost of new building within the limits of the national purse by bringing house ownership rather than subsidised council house tenancy within the range of the £8 a week earner." The Carlisle Association suggest a Government grant of £300 to encourage owner occupation. Gainsborough want to see greater publicity for the sale of council houses.

A number of motions call attention to the need for reforming the Rent Restriction Acts. The need for concentrating on a programme of slum clearance and the reconditioning of old houses is also emphasised.

Under the heading of education, a motion from the Falmouth and Camborne Association "asks the Government to make proper provision for the repair, redecoration and modernisation of the county primary schools," and strongly urges that an energetic programme for this purpose be put into effect as quickly as possible alongside the new building time table.

A number of resolutions have been received on the subject of nationalised industries, included in which are warnings of the dangers of nationalising water supply services, an aim recently re-affirmed by the Labour Party.

WHY I BECAME A STONEMASON

By EDWARD COLSTON, *who came out first both last year and this in the Group 5 competition, open to senior apprentices who have spent over 45 months in the trade.*

I WAS advised by my father (who is a tradesman) to take up an apprenticeship on leaving school. My ambition was to be a carpenter, but there were no vacancies for apprentices at that particular time. Then I was offered the chance of being a stonemason.

At first the work did not appeal to me, as there were such jobs to do as making tea, sifting stone dust, working the hand-crane, etc., and it seemed to me then that I was just wasting my time. But after a while I was given my first piece of stone to work. As it was just a job of working a plain ashlar face, this also became a bit boring after a while. But just after I had been six weeks at the trade, I was given my first actual job; it was making a bird-bath. On completing it my foreman told me it was very well worked. It was then that I started taking an interest in the masonry trade. Gradually I became more used to handling the tools, and the work became more varied and interesting. Working jambs, and other various parts, which go towards completing a building, I became anxious to see how and where they went, after leaving the yard. Then my employer, Mr. Damer, who takes a keen interest in the apprentices, gave me the chance of seeing how this was done, by sending me out fixing. My enthusiasm for looking at this side of the trade did not disappoint me, as I saw the way a building could start from nothing and be finished really looking very beautiful. Then I was entered, with other apprentices, for the exams which are run every year by the LMBA, in which I came first. Following the results of the examinations we were taken on an outing to a place of historic beauty.

With the help of various young and old masons, I was gradually taught the quickest and neatest way to work a job. After being in the trade for about four years, I had the pleasure of receiving an invitation to attend the annual dinner of the Worshipful Company of Masons, which was held at the Grocers Hall.

On the 20th of September of this year my apprenticeship finished, and now that I have completed it I am glad that I did not take up carpentry. I don't believe there is any other trade in the building industry more interesting than the craft of Masonry.

Icelandic Gift Proposal

To be considered shortly in Hull is the disposal of a £20,000 Icelandic good-will gift. The matter will be discussed by the city's housing committee. A tentative suggestion has been made that the money should be spent on the provision of homes for aged Hull trawlermen, and it has been suggested that a suitable site should be found in the fishing quarter of the city. The gift was made in 1946 by the Icelanders in recognition of the services of British fishermen during the war in minesweeping.

MASTER STONEMASONS

London Apprentices' Prizegiving

THE seventh annual prizegiving of the London Association of Master Stonemasons took place on September 25 at the LMBA headquarters, Bedford-square. MR. W. B. TAYLOR, president of the Association, presided.

MR. C. E. M. EMMERSON, Deputy Master of the Worshipful Company of Masons, presented the prizes, after congratulating the boys on the quality of their work in the examination.

MR. J. LEONARD, assistant general secretary of the Amalgamated Union of Building Trade Workers, associated the trade union movement with the better training of apprentices, and MR. C. HARVEY, vice-president of the London Association of Master Stonemasons, moved a vote of thanks to all who had contributed to the success of the occasion.

The practical examination was held last June, and 76 boys, grouped into five classes, took part. The general standard of work was high and, in the opinion of the examiners, the enthusiasm and the spirit of competition shown by all the boys confirm the belief that these annual tests provide a very real incentive to the boys to take their work seriously. A fixing test was also held. Eight boys entered, and some very good results were obtained. The tests were set and the work judged by Mr. C. A. Linge, Mr. J. Taylor and Mr. H. Tucker.

A contest between eight London boys and eight boys from Portland was later held at Portland, and after a very keen contest the London boys lost by a narrow margin the shield which had been presented by the London Association of Master Stonemasons. The names of the winning boys will be engraved on one of the plaques round the shield. Next year it is hoped that a team from Liverpool may also take part.

The recipients of prizes at last Friday's ceremony were as follows:—

Group 1.—1st. A. Cunningham (South Western Stone Co., Ltd.). 2nd. J. R. Walker (South Western Stone Co., Ltd.). 3rd. B. N. Rowland (Wandsworth Stonemasonry Works). 4th. E. Rees (South Western Stone Co., Ltd.). Consolation prize, R. O'Connor (South Western Stone Co., Ltd.).

Group 2.—1st. J. S. Hotson (South Western Stone Co., Ltd.). 2nd. W. Dare (Nine Elms Stonemasonry Works). 3rd. C. W. Bartrick (South Western Stone Co., Ltd.). 4th. E. C. Belcher (Albion Stone Works, Ltd.). Consolation prize, K. N. Wakley (South Western Stone Co., Ltd.).

Group 3.—1st. G. Abbs (South Western Stone Co., Ltd.). 2nd. G. F. Potter (Samuel Bysouth & Sons). 3rd. C. D. Ash (South Western Stone Co., Ltd.). 4th. T. Patten (Samuel Bysouth & Sons). Consolation prize, J. Corbett (Damer Bros.) and J. H. Golbold (Albion Stone Works).

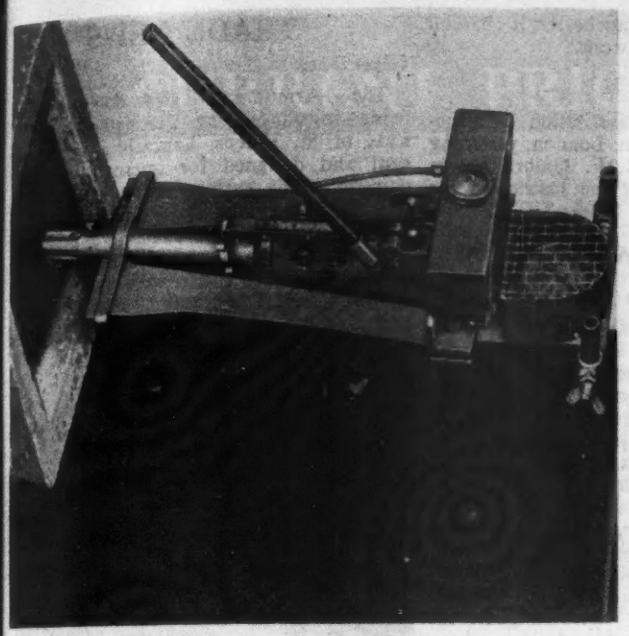
Group 4.—1st. D. Brewer (Nine Elms Stonemasonry Works). 2nd. W. Mitchell (Nine Elms Stonemasonry Works). 3rd. E. F. Bedford (Ashby & Horner, Ltd.). 4th. W. J. Roberts (Nine Elms Stonemasonry Works). 5th. S. Heald (Wandsworth Stonemasonry Works). Consolation prize, D. Leppard (Wandsworth Stonemasonry Works).

Group 5.—1st. E. Colston (Damer Bros., Ltd.). 2nd. B. A. Smith (Nine Elms Stonemasonry Works). 3rd. G. Davis (Wandsworth Stonemasonry Works). Consolation prize, B. Brooks (Wandsworth Stonemasonry Works).

Fixing Test.—1st. R. A. Glenin. 2nd. D. Crew. 3rd. B. A. Smith (all of Nine Elms Stonemasonry Works).

Higher Education

The Regional Advisory Council for Higher Technological Education in London and the Home Counties have published a list of regional advisory councils and the local authority areas included in each region. Copies may be obtained from their offices at Tavistock House South, Tavistock-square, WC1, price 1s.



The Gifford-Udall prestressing jack.

NEW PRESTRESSING JACK AND ANCHORAGE SYSTEM

THE new Gifford-Udall prestressing jack, developed by Udall's in conjunction with their consulting engineer, Mr. E. W. H. Gifford, and the CCL anchorage system is the result of close co-operation between the J. J. Udall's Building Co., Ltd., of Southampton, and Cable Covers, Ltd., of Westminster.

The Gifford-Udall-CCL prestressing system is based on the simple method of prestressing by tensioning the wires individually, thus enabling jack and pump to be combined into one light, compact tool which can be operated by one man. The jack will tension any size of wire up to 0.276 in. and for post-tensioned work the wires can be arranged in groups of up to 12 wires in each duct. The extension is 4½ in., but alternative forms can be provided giving up to 14 in. extension. The wires are anchored by standard CCL anchor grips as currently used on pre-tensioning beds. These combine a wedge action with a mechanical grip which gives a secure fastening. For post-tensioning work these grips bear against mild steel plates at the end of the concrete member. Spring-loaded anchor grips can be supplied when future extension of the wires is anticipated. In pre-tensioned work the grips may be recovered and used many times over. The jack itself is designed to grip, extend and anchor a wire in such a manner as to eliminate any risk of slipping. Extension is measured against an adjustable rule and load on a direct-reading gauge. The jack and pump, being combined in one unit weighing 56 lb., is easily transportable.

Further information from Cable Covers, Limited, Prestressed Concrete Division, St. Stephens House, Westminster, SW1.

INTERNATIONAL FEDERATION OF PRESTRESSING

First International Congress

THE International Federation of Prestressing has accepted the invitation of the Prestressed Concrete Development Group to hold its First International Congress in London from October 6 to 9 next. The technical sessions will be held at the Institution of Civil Engineers, 5, Great George-street, London, SWI (adjacent to Parliament-square).

Eminent engineers have prepared reports from contributions received on the following three aspects of prestressed concrete: The influence of abnormal temperatures on prestressed concrete construction; the design of statically determinate beams and slabs in prestressed concrete, based on ultimate load; statically indeterminate structures in the plastic and elastic states.

The languages of the Congress will be English, French and German and the reports will be printed in advance in these three languages and issued to those accepting the invitation to the Congress. At the close of the Congress the reports, together with written comments and recorded discussions, will be printed in the form of Proceedings.

Any person actively interested in prestressed concrete may become a member of the Congress upon payment of the registration fee of £2 2s. Registration will take place at the Institution of Civil Engineers, between 10 am and 12 noon, and 2 and 3 pm on Tuesday, October 6.

Among a number of excursions arranged during the congress are:—Visits to prestressed concrete hangars at London Airport, the Concrete Development Co., Ltd.'s prestressed concrete products factory at Iver and the Research Station of the Cement and Concrete Association at Wexham Springs, Bucks.

At the Association's Research Station visitors will be given an account of the research work on prestressed concrete which is in progress there and will have the opportunity of inspecting the laboratories.

October 8.—Visits to prestressed concrete products factory of Costain Concrete Co., at Childerditch, prestressed concrete gantry at Tottenham and a prestressed concrete covered culvert at Leyton.

October 9.—Visits to a five-span prestressed concrete road bridge under construction at Southampton, J. J. Udall's Building Co., Ltd., for a demonstration of the Gifford-Udall prestressing jack, bus garage at Bournemouth with prestressed concrete shell roof, and a number of prestressed concrete road- and foot-bridges in the New Forest area.

Further information may be obtained from P. Gooding, secretary, Prestressed Concrete Development Group, Cement and Concrete Association, 52, Grosvenor-gdns., London, SW1.

BUILDING IN HULL

Outline Plan to be Prepared

THE Town Planning Committee of Hull is to consult with Mr. Frederick Gibberd, FRIBA, MTPI, architect for the city's new college of technology, with a view to the preparation of a design in outline and a report on the materials to be used in the buildings which will surround Queens-gardens. The buildings, in addition to the college, include the Crown buildings and the new police station.

The decision follows a recent report of the town planning officer, Mr. H. I. Alston, in which he drew attention to the probability that within the next 10 or 20 years the Queens-gardens would be surrounded by new public buildings and would become the main feature of the city centre. As a start had already been made on the erection of the College of Technology, and, as an architect had been appointed to prepare plans for the new police station, it was recommended that steps should be taken as soon as possible to prepare a comprehensive scheme whereby the design and materials of the proposed building would ensure that the development of the gardens would take place in a manner "pleasing, harmonious and worthy of its importance."

Post-War Reconstruction

The council has decided to compile an illustrated brochure detailing reconstruction in the third port during the past eight years. The brochure will tell the story of the city's rise from the ashes left by the German bombing raids on the city in the early part of the war. The town planning committee feel that the brochure would be an indication of the physical reconstruction carried out. Compared with other towns which suffered devastation during the war, Hull, the committee feels, has nothing to be ashamed of in the progress and development it has made.

A Multi-Storeyed Building

There is a proposal by Ravenseft Properties, Ltd., to follow up their present building scheme in Hull's city centre by developing a blitzed site at the corner of Jameson-street and Prospect-street on a leasehold basis.

The new plan will involve the demolition of a café on the ground floor of the existing bomb damaged building, and will mean the erection of a large store four storeys high, and other properties two and three storeys high.

The proposal has been referred to the town planning sub-committee for further consideration.

OFFICIAL NOTIFICATION

Census of Production Report, 1950

ON SEPTEMBER 14, the Board of Trade announced [as reported in *The Builder* of September 18] that Vol. 12 of the Report on the Census of Production for 1950 was being published and would cover building and contracting and civil engineering, among other subjects.

It is regretted, states the BoT, that this description was misleading. The figures in Vol. 12 relate only to the gas supply industry, electricity supply industry and water undertakings. Building and contracting and civil engineering trades were excluded from the Census for 1950.

NEWS IN BRIEF

Low-Cost Bungalow

Dover RDC are to submit details of an £800 bungalow to the Ministry of Housing, asking whether it would be approved for subsidy.

Appointment

Mr. J. L. Bleazard, formerly engineer and architect to Kidsgrove UDC, has been appointed surveyor and housing manager to Thorne RDC.

Change Of Address

The address of the British Cast Concrete Federation has been changed from 17, Amhurst-road, Ealing, W13, to 105, Uxbridge-road, Ealing, W5. (Tel.: Ealing 9621.)

Diploma Presentation

A presentation of diplomas for Leeds School of Architecture and Town Planning was made on September 26 by Mr. Harold Conolly, FRIBA, County Architect for Essex, in the City of Leeds Art Gallery. Mr. Conolly also opened the School's Exhibition, which will be held until October 11.

Junior RICS Meetings

Two interesting meetings are being held this month by the junior organisation of the Royal Institution of Chartered Surveyors. On October 8, Mr. R. E. Megarry, MA, LLB, will give an address at the Institution on "The Rent Acts"; and on October 13, Mr. W. Tompkins will speak on "Tendering Procedure from the Builder's Point of View," at the Talbot Restaurant, London Wall, EC2.

Guard Dogs

Two Alsations are being used by Wates, Ltd., of Norbury, as guard dogs to reduce damage done by vandals on building sites. Work has been held up for weeks in some instances by children turning new sites into playgrounds after dark. Newly-laid brick walls and windows are smashed. The dogs have been given six months' training, and taught to act as guard dogs.

MoHLG SE Regional Office

On October 1, the South-Eastern Regional Office of the Ministry of Housing and Local Government was transferred from Tunbridge Wells to London. The new address is: Ministry of Housing and Local Government (South-Eastern Region), Whitehall, London, SW1 (telephone: Victoria 8540). Personal callers should go to Caxton House, Tothill-street. Mr. J. E. Beddoe, Assistant Secretary, is the Principal Regional Officer in charge.

Alleged Contravention of Regulations

When a case in which a professor and a builder, committed for trial on summonses alleging contraventions of the building regulations, was called at Manchester Quarter Sessions on September 29, the Recorder, Sir Noel Goldie, QC, said that having regard to the amount of money involved, he would remit the case for trial at the next Manchester Assizes. Bail was renewed in each case.

Professor A. M. Boyd, a surgeon, of Platt-lane, Rusholme, Manchester, is accused of directing unlicensed work, at a cost of more than £5,000, to be carried out at his home. James Kilday, a builder, of Chorlton-cum-Hardy, Manchester, is charged with carrying out the work.

New President Installed

At a meeting of the Institution of Structural Engineers, held in London yesterday (October 1), Lt.-Col. R. F. Galbraith was installed as president of the Institution for the 1953-54 session.

WINDOW OPERATING GEAR

Comprehensive Catalogue

A COMPREHENSIVE catalogue (No. 267) illustrating every type of gearing for the operation of windows, doors and roof lights, from simple fanlight openers to systems capable of operating tiers of lights hundreds of feet in length, has just been issued by Henry Hope and Sons, Ltd., Smethwick, Birmingham. The catalogue is divided, for convenience, into five sections: Shaft and lever gear, hand or power controlled; tension gear, applicable to ranges of opening lights up to 300 ft. long, with electric control; cable gear, for operation of single lights out of reach; hydraulically operated gear, recently introduced in power stations where hydraulic power is also employed for other purposes; and special duty gear, showing examples of special gearing designed by the firm to meet unusual problems. In addition to numerous photographs showing Hope's gearing and windows in use in a wide variety of buildings, the catalogue also contains a number of diagrams and technical information which should facilitate the selection of the most suitable type to meet particular requirements. Copies of the catalogue are available free of charge to architects and engineers on request either from the firm's head office, at Smethwick, or from the London office, at 17, Berners-street, W1.

PERSONAL COLUMN

Sealocrete Products, Ltd., Hythe-rd., NW10, have expanded their London sales staff by appointing MR. J. F. TAFFURELLI as technical representative to assist MR. A. W. B. SCOTT in the London area and that part of Essex adjoining London.

REMEMBER

HELICON FLOORS

ARE FIRE-PROOF

AND

SOUND RESISTING

Helicon

THE HELICAL BAR & ENGINEERING CO. LTD.
82 VICTORIA STREET, WESTMINSTER, LONDON, S.W.1
Phone: VICtoria 6838
Resident Agents: Birmingham, Middlesbrough, Newcastle

M-W.53

TRADE NEWS

Glass Door

The "Armourcast" glass door, which is being introduced by Pilkington Brothers, Ltd., of St. Helens, Lancashire, is translucent and designed for internal use. The dappled inside surface breaks up the light passing through the door, and gives a measure of privacy while enabling a person to see if the room is occupied or not, or to

avoid a threshold collision. The door also allows light to be borrowed from the main room to lighten adjoining rooms, passages, corridors and cupboards. It is without ledges or mouldings to facilitate cleaning, and is made from ¼-in. rough cast glass, toughened for additional strength. The hinge and lock fittings are of bronze with antique finish, and a door check and closer is supplied. The doors are normally supplied in standard sizes with a single action opening inwards, but non-standard sizes opening outwards can be made to order.

Pitch Pine

Details of the range of sizes and qualities of pitch pine available are set out in a leaflet entitled "Longleaf Pitch Pine," produced by Mallingson and Eckersley, Ltd., Brown-street, off Worsley-street, Salford 3.

Mastic Compound

A mastic compound claimed to be imperishable and to remain resilient, acid-resistant and waterproof indefinitely is being produced by the Andrew Maxwell branch of the Liverpool Borax Co., Ltd. Known as "Rito," the compound is available in green, red and stone colour. Details may be obtained from the manufacturers at Maxwell House, 6, St. Paul's-square, Liverpool 3.

Sales Conference

A two weeks international sales conference was held recently by Acrow (Engineers), Ltd., which was attended by principals and agents from over 40 countries. A dinner and dance to celebrate the 17th anniversary of the company was held at Grosvenor House, and was attended by 1,500 guests. Members of the conference visited the company's works at Harefield, Middlesex.

The Builder

CURRENT PRICES OF MATERIALS

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. Due to the exceptional circumstances now prevailing it is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£ s. d.
Pit Ballast	per yd.	1 0 11
Pit Sand	"	19 11
Washed Sand	"	1 1 9
¼ in. Shingle	"	18 5
¼ in. Broken Brick	"	19 3
Pan Breeze	"	9 6
Fine or Coarse Foamed Slag Aggregate ... ... 2 yds. of fine and 2.6 yds. of coarse per ton	per ton	2 18 1

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

		£ s. d.
Best British Portland Cement. Standard Specification delivered Charing Cross area.		
6-ton loads and upwards, site	"	4 15 0
1 to 6 tons, site	"	5 4 0
Ferrocrete Rapid Hardening Cement in 6-ton loads and upwards to site	"	5 3 0
1 to 6 ton do. site	"	5 12 0
Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices		
Red, Buff or Khaki Colorcrete in 6-ton lots ...	"	6 16 6
Other colours according to colour.		
In 4-ton lots from 210s. 3d. to 434s. 3d. per ton.		
White Portland Cement	"	12 15 6
Under 1 ton	per cwt.	15 3
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	6 7 6
Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.		
Cullamix Tyrolean Finish, £9 2s. 9d. to £10 16s. 3d. (1-ton loads and upwards).		
Lightning and Ciment Fondu Brands High Aluminous cement, 6-ton lots and up	"	14 0 9
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	"	5 15 0

BRICKS

		£ s. d.
Full Loads		
First Hard Stocks	per 1,000	11 0 6
Second Hard Stocks	"	10 4 6
Mild Stocks	"	8 13 6
All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.		
2½ in. Nominal Fletton Bricks to sites in W.C. District. Commons	"	5 10 0
Cellular do.	"	5 10 0
Keyed do.	"	5 12 0
Rustics	"	6 15 0
Cellular Rustics	"	6 15 0
Single Bullnose do.	"	6 10 0
Sandfaced	"	7 10 0
Cortex Facing Bricks	"	6 5 0
Best Blue Pressed Staffs (London Stations) ...	"	23 17 6
Do. Bullnose (London Stations)	"	24 11 6
Blue Wire Cuts (London Stations)	"	21 10 6
Midhurst Lime Bricks (London Sites)	"	9 18 0
Uxbridge Whites (London Sites)	"	8 16 6
2½ in. Best Stourbridge Fire Bricks (London Stations)	"	22 3 0
3 in. do. (London Stations)	"	26 11 6
2½ in. Machine-made Sandfaced Red Facings (London Sites)	"	13 9 6
2½ in. Machine-made Multi Red Facings (London Sites)	"	13 14 6
2½ in. Hand-made Sandfaced Red Facings (London Sites)	"	14 3 6
2½ in. Hand-made Sandfaced Multi Colour Facings (London Sites)	"	14 3 6
2½ in. Surrey Clamp Burnt Multi Stock Facings (London Sites)	"	12 14 0
2½ in. Surrey Kiln Burnt Multi Stock Facings (London Sites)	per 1,000	13 12 6
Glazed Bricks (London sites), White, Ivory, Brown—		
Stretchers	"	64 0 0
Headers	"	63 0 0
Quoins, Bullnose and 4½ in. Flats	"	80 0 0
Double Stretchers	"	85 0 0
Double Headers	"	77 10 0
One side and two ends	"	87 0 0
Two sides and one end	"	89 10 0
Splays and Squints	"	83 0 0

Second quality — 10% Bests. Cream and Buff £3 extra over White. Other colours, hard glaze. £8 10s. 0d. extra over White.

PARTITION SLABS, etc.

Delivered Central London Area.

	Minimum lorry loads.		£ s. d.
Hollow Clay Partition Blocks (Keyed)			
2 in.	150 yds.	per yd. sup.	4 3
2½ in.	135 yds.	"	4 6
3 in.	125 yds.	"	5 0
4 in. (6 cavity) ...	95 yds.	"	6 7
Half blocks at no extra charge.			
Clinker Concrete			
2 in.	100 yds.	"	3 5
2½ in.	85 yds.	"	4 0
3 in.	75 yds.	"	4 8
4 in.	55 yds.	"	5 10
Cranham			
2 in.		"	6 5
2½ in.		"	7 1
3 in.		"	8 2
4 in.		"	10 1
4½ in. Load bearing quality		"	11 1
Floor Blocks			
3 in. Floor Blocks 12 in. by 12 in. delivered in full lorry-loads		per 1,000	31 10 0
4 in. do.		"	34 13 0
5 in. do.		"	39 7 0
6 in. do.		"	46 16 0
7 in. do.		"	54 1 0
8 in. do.		"	61 15 0

STONEWARE DRAIN PIPES, etc.

The following are the percentages to be added to the Standard List prices delivered London Area.

	Over 2 tons	Over 100 Pieces under 2 tons	Under 100 Pieces under 2 tons
Best Quality	+67½%	+87½%	+97½%
B.S.S. Best do.	+10% +67½%	+10% +87½%	+10% +97½%
Tested Quality	+37½% +67½%	+37½% +87½%	+37½% +97½%
B.S.S. Tested do.	+47½% +67½%	+47½% +87½%	+47½% +97½%

		£ s. d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	9 19 0
4 in. do.	"	13 1 0
6 in. do.	"	27 1 0

STONE

		£ s. d.
Bath Stone—		
Monks Park	per ft. cube	6 8
St. Aldhelm Box Ground	"	7 8
Delivered in railway trucks at South Lambeth B.R. Western Region		
Doulting Stone Random Blocks. Delivered London area	"	7 5
Beer Stone. Delivered London area	"	7 0
Portland Stone—		
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	"	7 5
Hopton-Wood Stone—		
F.O.R. Quarries, Wirksworth, Derbyshire—		
¾ in. Slabs for wall lining, sawn two sides in random sizes up to 5 ft. and not over 15 ft. super in area	per ft. sup.	6 2
1½ in. Slabs for paving, sawn two sides as above described	"	8 6
Yorkshire Stone—Blue Robin Hood Quality.		
Delivered to site London in 6-ton lots.		
9 in. × 3 in. Rubbed, weathered, throated and stooled cills	per ft. cube	3 1 9
12 in. × 6 in. do. do.	"	2 4 3
12 in. × 3 in. Plain coping, twice throated ...	"	1 14 0
12 in. × 3 in. Weathered and twice throated coping	"	2 5 6
14 in. × 6 in. do. do.	"	2 1 0
4½ in. × 9 in. Plinth, rubbed on top and face ...	"	1 16 9
3 in. sawn two sides Slabs, random sizes... ...	per ft. sup.	6 6

STONE—*continued*

	£ s. d.
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...per ft. cube	1 2 6
Do. do. fair one edge for fair faced brickwork	1 6 9
Hard York—	
12in. × 2in. Square Steps, rubbed on top and edge per ft. run	7 10
14 in. ×3 in. Round-nosed Steps, rubbed on top and front ... ...per ft. cube	2 2 0
12 in. × 6 in. Plain Steps, rubbed top and front ,,	1 16 9
2 in. Rubbed and Jointed Paving, given sizes per ft. sup.	7 6
2 in. Sawn Paving, edges squared, in random sizes per yd. sup.	2 11 9

TILES and PANTILES

	£ s. d.
Delivered London area by road in 6 tons or over per 1,000	
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	28 18 6
Hand-made Pantiles Berkshire district	41 18 6
Hand-made Double Roman Bridgwater district	56 17 6
Hand-made 10½ × 6½ tiles Berkshire district	12 15 6
Machine-made 10½ × 6½ Staffordshire district	13 5 0
Hand-made Hip and Valley tiles per doz.	1 8 6
Machine-made Hip and Valley tiles do.	1 6 3
Concrete tiles 10½ × 6½	6 18 6
do. Interlocking (49S)	18 9 6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

	£ s. d.
First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.	
24 × 12	100 16 9
22 × 12	86 6 6
22 × 11	78 0 6
20 × 12	73 3 3
20 × 10	68 10 9
18 × 10	50 17 0
18 × 9	43 15 0
16 × 10	42 18 3
16 × 8	33 13 3

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

			£ s. d.
Softwood—			
Joinery quality	...Ex. Wharf per standard		£105 to £125
Carcassing quality	do.	,,	£90 to £100
1 in. Tongued and Grooved Flooring	do.	,,	£106 0 0
Hardwood—			
Mahogany— African S.E. ...	do.	per ft. cube	1 5 0
do. Honduras do. ...	do.	,,	2 15 0
Oak European do. ...	do.	,,	1 17 6
do. Japanese do. ...	do.	,,	1 15 0
do. English Logs sawn	do.	,,	1 5 0
Teak 8 in. average S.E.	do.	,,	3 0 0
Walnut African Logs sawn	do.	,,	1 1 0

DOORS (in Lots I-II)

	£ s. d.
Delivered London area.	
1½ in. 4 Horizontal Panel. Pattern 4 in. deal	
2 ft. 0 in. × 6 ft. 6 in. ... ... each	1 12 0
2 ft. 3 in. × 6 ft. 6 in. ... ... ,,	1 13 0
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	1 14 6
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	1 16 9
2 in. do., but top panel open. Pattern 4 × G in deal	
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	2 10 6
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	2 13 6
2 in. 2 Panel, top panel open. Pattern 2 × G in deal	
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	2 3 9
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	2 6 6

SUNDRIES

	£ s. d.
Delivered London area	
1 in. Wood Wool Slabs, 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton) ... ... per yd.	5 8
1½ in. do. (67 yds. to 1 ton) ... ... ,,	7 4
2 in. do. (52 yds. to 1 ton) ... ... ,,	8 11½
2½ in. do. (45 yds. to 1 ton) ... ... ,,	10 3
3 in. do. (39 yds. to 1 ton) ... ... ,,	11 5½
Quantities under 1 ton add 1d. per ½ in. of thickness.	
½ in. imported insulation Board, quantities over 5,000 sq. ft. per 100 sq. ft.	2 2 6
¼ in. Hardboard do. ... ... ,,	2 3 6
⅛ in. do. do. ... ... ,,	3 2 6
⅛ in. Asbestos Flat Building Sheets ...per yd. sup.	2 11
Roofing Felt, 1-ply ... ... ,,	1 6
do. 2-ply ... ... ,,	1 9
Best Scotch Glue, in slabs ... ... per ¼ cwt.	5 0 0
do. pearl ... ... ,,	5 5 0
Croid Glue ... ... 28 lb.	2 5 0
Cut Nails, 3 in. and up (1-ton lots) ... ... per ton	59 5 0
Wire Nails, 3 in. (4-cwt. lots) ... ... per cwt.	2 13 8
do. 4 in. and up (4-cwt. lots) ... ... ,,	2 10 3

METALS STEEL JOISTS, ETC.

	£ s. d.
Basis Joists—	
6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in., 12 in. × 6 in. plain cut to lengths delivered London area ... ... per ton	37 2 6
Extra for sizes	
3 in. × 1½ in. ... ... ,,	3 10 0
3 in. × 3 in., 4 in. × 3 in., 5 in. × 2½ in. ... ,,	1 5 0
4 in. × 1½ in. ... ... ,,	3 0 0
4½ in. × 1½ in., 24 in. × 7½ in. ... ... ,,	2 0 0
5 in. × 3 in., 22 in. × 7 in. ... ... ,,	1 0 0

	£ s. d.
6 in. × 3 in. ... ... per ton	1 10 0
9 in. × 7 in. ... ... ,,	5 0
10 in. × 4½ in., 12 in. × 5 in. ... ... ,,	15 0
5 in. × 4½ in., 6 in. × 4½ in., 7 in. × 3½ in., 7 in. × 4 in., 8 in. × 4 in., 9 in. × 4 in., 10 in. × 5 in., 10 in. × 8 in., 12 in. × 8 in., 13 in. × 5 in., 14 in. × 5½ in., 14 in. × 6 in., 14 in. × 8 in., 15 in. × 5 in., 15 in. × 6 in., 16 in. × 6 in., 16 in. × 8 in., 18 in. × 6 in., 18 in. × 7 in., 18 in. × 8 in., 20 in. × 6½ in., 20 in. × 7½ in. ... ... ,,	10 0
Steel angles average price ... ... ,,	38 7 6
Steel tees average price ... ... ,,	39 7 6
Fabricated work delivered London—	
R.S. Joists cut and fitted ... ... ,,	51 15 0
Compound girders ... ... ,,	57 0 0
Stanchions ... ... ,,	62 0 0
Compound stanchions ... ... ,,	65 0 0
In Roof Work—Trusses and Purlins ... ... ,,	77 0 0
Average prices not for awkward work.	
Mild Steel Ferro-Concrete bars to BSS785 ex London	
Stock ⅜ in. diam,, and upwards ... ... ,,	37 1 6
¼ in. diam. ... ... per ton extra	3 12 0
⅛ in. do. ... ... ,,	2 17 0
⅜ in. do. ... ... ,,	2 2 0
½ in. do. ... ... ,,	1 7 0

MILD STEEL TUBES.

Tubes to BSS1387 and Fittings. List prices and following discounts:

Galvanised Tube—	W.I. Fittings	Malleable Fittings
Class A — 4½%	Light +20½%	Malleable List — 39½% + 35%
Class B + 4½%	Heavy +27½%	
Class C + 20½%		
Black—		
Class A — 23½%		
Class B — 13½%	Light + 8½%	Malleable List — 39½%
Class C — 1¼%	Heavy + 16%	

C.I. HALF-ROUND GUTTERS

Delivered London per yd. in 6-ft. lengths	Gutters	Nozzles	Stop Ends
3 in.	3/5	2/9	/10
3½ in.	3/4½	3/–	/10
4 in.	4/4	3/4	1/2
4½ in.	4/9	3/8	1/5
5 in.	5/4	4/1	1/7

C.I.O.G. GUTTERS

3 in.	4/–	3/7	/11
3½ in.	4/5½	3/7	1/2
4 in.	4/10½	3/8	1/6
4½ in.	5/4	4/4	1/8
5 in.	5/9½	4/11	1/11

C.I. RAIN-WATER PIPES

Per yd. in 6-ft. lengths	Pipe	Bends	Branches
2 in.	6/4	3/4	4/9
2½ in.	6/7	3/8	6/7
3 in.	7/5	4/8	7/1
3½ in.	8/4½	5/7	8/5
4 in.	9/8½	6/9	9/11

L.C.C. COATED SOIL PIPES

2 in.	7/5½	5/9	7/–
2½ in.	7/10½	6/4	8/8
3 in.	8/10	7/–	10/5
3½ in.	9/11	8/8	12/1
4 in.	11/3½	9/9	14/3

Above prices for gutters rain-water and soil pipes for under 3 cwt. lot only. Lots over 3 cwt. see List No. 3200 dated May 1, 1952, plus 7½% and tonnage allowance. 4-ton. lots 5 per cent. 2-ton lots 2½ per cent.

L.C.C. COATED DRAIN PIPES.

In 9-fts.	cwt.	qr.	lb.	per yd.	Bends	Branches
4 in.	1	1	17	20/1	13/10	24/5
6 in.	2	0	1	29/10	28/10	49/11

ASBESTOS RAIN-WATER PIPES AND FITTINGS.

Orders under £30 less 12½ per cent. discount.
Orders over £30 less 17½ per cent. discount.

		2 in.	2½ in.	3 in.	4 in.
Pipes 6-ft. lengths	per yd.	3/6	3/9	4/6	6/–
Shoes	each	2/3	2/6	3/–	4/–
Single Branches ...	,,	3/6	4/3	5/–	7/–
Bends square or obtuse	,,	2/6	2/9	3/6	5/–
Swan Necks 4½ in. proj.	,,	2/9	3/6	4/–	5/6
do. 6 in. do.	,,	3/–	3/6	4/6	6/–

ASBESTOS O.G. GUTTERS AND FITTINGS.

		4 in.	4½ in.	5 in.	6 in.
Gutters 6-ft. lengths	per yd.	3/3	3/7	4/3	5/2
Drop ends ...	each	2/3	2/4	2/7	3/3
Stop Ends ...	,,	/9	/10	/11	1/1
Angles and nozzles	,,	2/8	3/1	3/7	4/3
Union Clips ...	,,	1/4	1/7	1/11	2/3

ASBESTOS HALF-ROUND GUTTERS AND FITTINGS

		3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters 6-ft. lengths	per yd.	2/4	2/9	2/10	3/4	4/8
Drop ends	each	2/–	2/3	2/6	2/9	4/–
Stop ends	,,	/8	/9	/10	/11	1/1
Angles	,,	2/3	2/6	2/9	3/–	4/–
Nozzles	,,	2/–	2/3	2/6	2/9	4/–
Union Clips	,,	/11	1/–	1/1	1/3	1/10

METALS—*Continued.*

	Per ton basis in London £ s. d.
Iron—Staffordshire Crown Merchant Quality	39 10 0
Mild Steel Bars	37 8 0
Mild Steel Hoops	38 3 0

	Ex Merchant's Stock per ton Two-ton lots £ s. d.
Soft sheets C.R. and C.A.—	
20 gauge	45 12 6
24 gauge	46 17 6
26 gauge	48 17 6
Galvanised Corrugated sheets 6 ft. to 9 ft.—	
20 gauge	52 17 0
24 gauge	54 17 0
26 gauge	57 12 0
Galvanised Flat sheets C.R. and C.A.—	
20 gauge	53 17 0
24 gauge	55 17 0
26 gauge	58 12 0

Metal Windows.—Standard Metal Windows, B.S. 940. Prices on application British Metal Window Manufacturers' Association, Ltd.

PLUMBERS' BRASS WORK, COPPER, ZINC, ETC.

Delivered in London area.

All per doz.	M.O.H. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron	66/6	98/10				
Toilet bib cocks for iron ...	88/4	127/4				
Screw down stop cocks for iron	57/-	84/6	162/6	307/2	399/-	763/10
do. with two unions for lead	77/-	114/-	202/4	427/6	575/9	1048/10
Double nut boiler screws ...	14/3	20/-	36/1	37/-	51/4	72/2
Heavy Croydon ball valves ...	62/9	144/6	248/-	490/2	615/6	
Plumbers' union brass lead to iron	16/2	20/8	30/-	52/3	64/6	125/6
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and screws	25/8	31/4	45/7	71/3	91/2	118/9
Brass sleeves		23/9	23/9	42/9	57/-	28/-
		1¼ × 6 lb.	1½ × 6 lb.	2 × 7 lb.		3 × 7 lb.
Lead P. trap with brass cleaning screws		60/-	75/-	120/-		205/-
Lead S. trap do.		72/6	90/-	147/6		265/-

Solder	s. d.
Plumbers' ... ... per lb.	2 9
Tinmen's ... ... ,,	3 4
Blow pipe ... ... ,,	3 6

Copper tubes BSS 659/1944 on the basic price of 27½d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 3 cwt.

	Extra d.	Total per lb. d.
½ in. × 19 gauge	11⅝	39½
¾ in. × 19 ,, ...	10⅞	37⅞
1 in. × 18 ,, ...	8⅝	36½
1¼ in. × 18 ,, ...	8⅛	35⅝
1½ in. × 18 ,, ...	8⅛	35⅝
2 in. × 17 ,, ...	9⅝	37⅛

	£ s. d.
Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras ... ... per ton	294 0 0
Sheet Zinc, 10 gauge, 5 cwt. lots upwards ... per cwt.	6 13 0
do. 12 gauge do. ... ... ,,	6 11 0
Brass tubes basic price, plus gauge and manufacturing extras ... ... per lb.	1 10

LEAD SHEET AND PIPES

Basis selling price in minimum one-ton delivery to one address in London or Home Counties.

	£ s. d.
Lead Sheet, English, 3½ lb. substance and upwards per ton	129 5 0
Lead Water Pipe in coils ... ... ,,	130 10 0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. dia. ... ,,	132 0 0
do. over 4 in. dia. ... ... ,,	134 0 0
Lead Gas or Untinned Compo pipe ... ... ,,	132 0 0
Extras over Basis for quantities under 1 ton	
5 cwt. and under 1 ton ... ... per cwt.	2 0
3 cwt. do. 5 cwt. ... ... ,,	4 0
1 cwt. do. 3 cwt. ... ... ,,	6 0

Smaller quantities than 1 cwt. priced specially.
Supplying sheet lead and lead pipe to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.
Allowance for Old Lead, collected £84 10s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

			£ s. d.
Coarse Pink in 1-ton loads and over	Delivered on Site	per ton	7 3 3
do. White	do.	... ,,	7 11 0
Sirapite Coarse	do.	... ,,	7 6 3
do. Fine	do.	... ,,	7 14 3
Blue Lias Lime in 6 ton loads		... ... ,,	6 5 0
Hydrated Lime do.		... ... ,,	5 9 0
Lump Lime do.		... ... ,,	4 18 6
White Keen's or Parian Cement in 1-ton loads		... ,,	10 0 9
Pink Keen's or Parian Cement in 1-ton loads		... ,,	9 15 3
Granite Chips in 6-ton loads		... ... ,,	2 6 3
Hair		per cwt.	4 17 6
Gypsum Plaster Lath or Base Board ⅜ in. thick 600 yds. and over in one delivery. Delivered site ...		per yd.	2 3
Gypsum Plaster Wall Boards, 3 and 4 ft. wide, 6 to 12 ft., ⅜ in. thick, 600 yds. and over in one delivery Delivered site		,,	2 6

PAINT AND DISTEMPER

Delivered London area		£ s. d.
Ceiling Distemper	per cwt.	1 12 0
Washable Distemper	,,	5 12 0
Gloss Paint	per gal.	2 15 0
Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	3 11 0

LEAD PRODUCTS AND OILS.

		£ s. d.
Ground White Lead 5 cwt. casks	per cwt.	8 2 0
1 cwt. kegs	,,	8 9 0
Genuine White Lead Paint, 20 gal. lots in 1 gal. tins	per gal.	2 18 0
Genuine Red Lead, Dry, 1 cwt. keg	per cwt.	6 13 0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2 17 6
Size XD quality, 28 lb.	per tin	9 0
Raw Linseed Oil (5 gal.) Drums extra	per gal.	18 6
Boiled Linseed Oil (5 gal.) do.	,,	18 11

SUNDRIES

		£ s. d.
Turpentine substitute (5 gal.) Drums extra ...	,,	5 6½
do. do. (40 gal. drum) do. ...	,,	4 9
Solignum, Brown (5 gal. cans), Exterior ...	,,	6 6
Creosote (40 gal. barrels)	,,	2 0
Paste Powder (1 lb. packets)	per lb.	1 6
White Lining Paper	per piece	1 4

VARNISHES, etc.

Delivered London area.		£ s. d.
Oak Varnish, Outside or Inside	per gal.	1 12 6
Oak Pale Copal do.	,,	1 15 0
Hard Drying Oak for Inside	,,	1 17 6
Crystal Paper Varnish do.	,,	1 15 0
Eggshell Flat Varnish do.	,,	2 2 6
Finest Carriage Varnish	,,	2 10 0
Front Door Varnish	,,	1 17 6
Japan Gold Size	,,	1 10 0
Black Japan	,,	1 5 0
Brunswick Black	,,	1 0 0
Berlin Black	,,	1 5 0
Terebene	,,	1 5 0
Knotting (1 gal. bottles free)	,,	2 0 0
French and Brush Polish (do.)	,,	1 13 0

GLASS

Delivered London area.

	Per ft. super s. d.
18 oz. Sheet Glass, Ordinary Glazing Quality. Cut Sizes	5½
24 oz. ,, ,, ,, ,, ,, ,, ,, ...	7½
26 oz. ,, ,, ,, ,, ,, ,, ,, ...	9¼
32 oz. ,, ,, ,, ,, ,, ,, ,, ...	1 0
¼ in. Rolled Plate	9
⅜ in. and ½ in. Rough Cast	1 0
¼ in. Figured Rolled and Cathedral, Standard patterns : White	9
do. Standard Tints	1 4½
do. Special Tints	2 9
¼ in. Cross Flexon, Pinstripe, Hammerstripe, Reedlyte and Luminating	1 1
¼ in. Wired Cast	1 2
¼ in. Georgian Wired Cast	1 2½

Hollow Glass Blocks—	Each s. d.
P.B.2 5¾ × 5¾ × 3¾ in.	2 9
P.B.3 7⅞ × 7⅞ × 3⅞ in.	4 2
P.B.32 7¾ × 7¾ × 3⅞ in.	4 2
Radiused Corner Blocks to match up with—	
P.B.2	5 3
P.B.3	6 9
P.B.32	6 9

	Per ft. super s. d.
¼ in. Polished Plate Glass, G.G. Quality—	
In plates not exceeding 2 ft. sup.	3 7
,, ,, ,, ,, 5 ft. sup.	4 5
,, ,, ,, ,, 45 ft. sup.	5 1
,, ,, ,, ,, 100 ft. sup.	5 6

¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 96 in. high or 160 in. wide. G.G. quality—
Not exceeding 135 ft. sup. or 250 in. one way or 135 in. both ways 8 4
Not exceeding 180 ft. sup., or ditto 11 3
Not exceeding 200 ft. sup., or ditto. 16 0
Plates exceeding 200 ft. sup., prices on application.
Substances other than ¼ in. Polished Plate at Special Prices

Quantity Tariff—Sheet and Sundry Glass.
The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass	Minimum quantity.	Per ft. super. s. d.
18 oz. sheet O.Q.	3,000	4
24 oz. ,, ,, ...	2,000	5½
26 oz. ,, ,, ...	2,000	7½
32 oz. ,, ,, ...	2,000	9½
¼ in. Rolled Plate	1,000	7½
¼ in. Figured Rolled and Cathedral Standard Patterns, White	1,000	7½
¼ in. Cross Flexon, Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte	1,000	10½
⅜ in. and ½ in. Rolled Plate or Rough Cast ...	2,000	10½
½ in. Wired Cast, Hexagonal	2,000	1 0½
½ in. Georgian Wired Cast	2,000	1 0½

The Builder

CURRENT RATES OF WAGES

AS FROM FEBRUARY 2, 1953. **(Every endeavour is made to ensure accuracy but we cannot be responsible for errors.)**

KEY TO SCHEDULE OF GRADE RATES.

Grade Classification.	A	A1	A2	A3
Craftsmen	3/6½	3/6	3/5½	3/5
Labourers	3/1	3/0½	3/0	2/11½

Town.	Grade.
Aberavon	A
Aberdare	A
Abergavenny	A
Abingdon	A2
Accrington	A
Addlestone	A
Aldeburgh	A2
Aldershot District	A2
Alfreton U.D.	A
Alnwick	A1
Altrincham	A
Amble	A1
Amersham	A1
Ammanford	A
Andover	A2
Ardingly	A2
Arundel	A2
Ascot	A2
Ashby-de-la-Zouch U.D.	A
Ashby Woulds U.D.	A
Ashford (Kent)	A2
Ashford (Middlesex)	A
Ashington	A
Ashtead	A
Ashton-under-Lyne	A
Aspatria and Brayton	A2
Atherstone R.D. (parts of)	A
Aylesbury	A2
Aylesby (Yorks)	A
Aylesham	A2
Bagshot	A2
Bakewell U.D.	A2
Banbury	A2
Barnard Castle U.D.	A
Barnoldswick U.D.	A1
Barnsley	A
Barrow-in-Furness	A
Barrow-upon-Soar R.D. (exc. Thrussington A2)	A
Barry	A
Basford R.D. (exc. Willough-by-on-the-Wolds A2)	A
Basingstoke	A1
Bath	A
Batley	A
Baxterley	A1
Beaconsfield & District	A1
Beamish	A
Bearl	A
Bearpark	A
Beccles	A2
Bedale R.D.	A
Bedford	A
Bedlington	A
Bedwas	A
Beeston & Stapleford U.D.	A
Belper U.D.	A
Belton	A
Berkhamsted	A
Berrington	A1
Berwick District	A
Beverley	A
Bexhill-on-Sea	A2
Biggleswade	A2
Billericay	A
Billing	A
Billingham U.D.	A
Bilsthorpe	A
Birchington	A2
Birkenhead	*
Birmingham C.B.	†A
Bishop Auckland	A
Bishop's Stortford	A
Bispham	A
Blackburn	A
Blackpool	A
Blackwell R.D.	A
Blaydon U.D.	A
Blidworth	A
Blyth	A
Bognor Regis	A2
Boldon U.D.	A
Bolsover U.D.	*A
Bolton	A
Bourne End	A1
Bournemouth District	A
Bracknell	A2
Bradford	A
Bradford-on-Avon	A2
Braintree	A1
Breconshire, County of...	‡A2
Brent Knoll	A2
Brentwood	A
Bridlington	A
Brierfield	A
Brighouse	A
Brighton	A
Bristol	A
Broadstairs	A2
Bromsgrove U.D.	A
Brough	A
Broughton (Cheshire)	A
Buckley	A
Bungay	A2
Burnham-on-Crouch	A2
Burnley	A
Burton-on-Trent C.B.	A
Bury	A
Bury St. Edmunds	A1
Buxton	A
Byfleet	A1
Calder Valley	A
Cambridge	A
Cannock U.D.	A
Canterbury	A2
Cardiff	A
Cardiganshire, County of	‡A2
Carlisle	A
Carmarthenshire, Cnty of	‡A2
Carnarvonshire, Cnty. of	‡A3
Carnforth	A
Castleford	A
Caterham	A
Chapel-en-le-Frith	A
Charmy Down	A
Chatham & District	A1
Cheadle (Staffs) R.D.	A
Chelmsford	A
Cheltenham	A
Chepstow	A1
Chertsey	A
Chester	A
Chesterfield M.B.	A
Chesterfield R.D.	A
Chester-le-Street U.D.	A
Chichester	A2
Chippenham (inc. Chippen-ham Within and Harden-huish	A2
Chorley	A
Clacton	A1
Cleethorpes	A
Clevedon	A1
Cleveleys	A
Clitheroe	A
Coalville U.D.	A
Cobham (Surrey)	A
Colchester	A
Colne	A
Colwyn Bay	A1
Congleton	A1
Consett	A
Conway	A1
Cornwall, County of	‡A2
Coventry C.B.	A
Cranbrook	A2
Cranleigh	A2
Crawley (Sussex)	A2
Crewe	A
Cromer	A1
Crowborough	A2
Cuckfield	A2
Dalton-in-Furness	A
Darlington District	A
Darwen	A
Deal	A2
Denbigh Town	A2
Derby C.B.	A
Devizes	A2
Devon, County of	‡A2
Dewsbury	A
Didcot	A2
Diss	A2
Doncaster C.B.	A
Dorking	A
Dorset, County of (except-ing Poole, Swanage and Wimborne A1)	A2
Dover	A2
Dovercourt	A
Driffield U.D.	A1
Droitwich M.B.	A1
Dudley M.B.	A
Dunstable	A
Durham City	A
Eastbourne	A1
E. Glam. & Mon. Val.	A
East Grinstead District	A2
Eastwood (Notts.) U.D.	A
Ebbw Vale & District	A
Edenbridge	A2
Ely	A2
Epping	A
Exeter	A
Fakenham	A2
Falmouth	A2
Fareham	A
Faversham	A2
Felixstowe	A1
Filey U.D.	A
Fleetwood	A
Flint	A
Folkestone	A2
Frinton	A1
Frome	A1
Gainsborough U.D.	A
Gateshead	A
Gillingham (Kent)	A1
Glossop	A
Gloucester	A
Gloucestershire, Cnty. of	‡A2
Godalming	A2
Goole M.B.	A
Gosport	A
Grantham M.B.	A
Gravesend	A
Great Yarmouth	A
Grimsby C.B. & R.D.(part)	A
Grimsby R.D. (remainder)	A2
Guildford District	A2
Guilsborough	A1
Guiseley	A
Halesowen M.B.	A
Halifax	A
Halstead	A2
Haresfield	A1
Harlow	A
Harpenden	A
Harrogate	A
Hartlepool	A
Harwich	A
Haslemere	A2
Hastings	A2
Hatfield (Herts.)	A
Haywards Heath	A2
Hemel Hempstead	A
Henley-on-Thames	A2
Hereford	A2
Herefordshire, Cnty. of...	‡A2
Herne Bay	A2
Hertford	A
Hexham U.D.	A
Heysham	A
High Wycombe	A1
Highworth	A2
Hinckley U.D.	A
Hitchin	A
Hoddesdon	A
Horley	A2
Horsham	A2
Horwich	A
Huddersfield	A
Hull	A
Hunstanton	A2
Huntingdon (Staffs)	A
Ilkley	A
Ingatestone	A1
Ipswich	A
Isle of Sheppey	A2
Isle of Thanet	A2
Isle of Wight	A2
Jarrow M.B.	A
Keighley	A
Kendal	A
Kenilworth U.D.	A
Kettering M.B.	A
Keynsham	A
Kidderminster M.B.	A
King's Lynn	A1
Kingskerswell	A1
Kingsteignton	A1
Kirkham	A
Knaresborough U.D.	A
Knowle	A1
Lancaster	A
Leamington M. B.	A
Leatherhead	A
Leeds	A
Leicester C.B.	A
Leighton Buzzard	A1
Letchworth	A1
Lewes	A2
Lichfield M.B.	A
Lincoln C.B.	A
Littlehampton	A2
Liverpool	*
Llandudno	A1
Llanelly	A
London	*
Long Eaton	A
Loughborough M.B.	A
Louth M.B.	A1§
Lowestoft	A
Loxton	A2
Luton	A
Lyneham (Devon)	A2
Macclesfield	A
Maidenhead	A1
Maidstone	A1
Maltby	A
Maldon (Essex)	A1
Malvern U.D.	A1
Manchester	A
Manningtree	A1
Mansfield M.B.	A
March	A2
Margate	A2
Market Harborough U.D.	A
Maryport	A
Matlock U.D.	A1
Melksham	A2
Melton Constable	A2
Melton Mowbray U.D.	A1
Merthyr	A
Middlesbrough	A
Middleton	A
Middlewich	A
Milford Haven	A1
Morecambe	A
Morley	A
Mundesley	A2
Nantwich	A
Nelson	A
Newark-on-Trent R.D.	A1
Newbury	A2
Newcastle-on-Tyne	A
Newcastle-under-Lyme	A
New Forest District	A1
Newmarket	A1
Newport, Mon.	A
Newport Pagnell	A2
Newton Abbot	A1
Northallerton Dist.	A
Northampton C.B.	A
North Shields	A
Norton Radstock	A1
Norwich	A
Nottingham C.B.	A
Nuneaton M.B.	A
Oakham U.D.	A2
Oldham	A
Ongar	A
Ormskirk	A
Ossett and Horbury	A
Oxford	A
Oxted	A1
Paignton	A1
Peterborough	A
,, Soke	A1
Pickering	A3
Plymouth	A
Pontefract	A
Pontypridd District	A
Portishead	A
Portland Stoneyards	A
Portsmouth	A
Port Talbot	A
Preston	A
Pudsey	A
Pulborough	A2
Radnorshire, County of	‡A2
Ramsgate	A2
Rayleigh	A
Reading	A
Redcar B.	A
Redditch U.D.	A
Redhill and Reigate	A
Ripon	A3
Rochdale	A
Rochester	A1
Rotherham	A
Rugby M.B.	A
Saffron Walden	A2
St. Albans	A
St. Helens	A
St. Neots	A2
Salisbury City	A2
Salisbury Plain	A2
Sawbridgeworth	A
Saxmundham	A2
Scarborough	A
Scunthorpe	A
Selby	A
Sevenoaks	A1
Sheerness	A2
Sheffield	A
Shipley	A
Shoeburyness	A
Shoreham	A
Shrewsbury M.B.	A
Sittingbourne	A2
Skegness U.D.	A1
Skipton U.D.	A
Sleaford U.D.	A2
Slough	A1
Smethwick C.B.	†A
Snettisham	A2
Somerset, County of	‡A2
Southampton	A
Southend-on-Sea Dist.	A
Southport	A
South Shields C.B.	A
Spalding U.D.	A2
Stafford M.B.	A
Staines	A
Stamford M.B.	A1
Stantonwick	A
Stevenage	A
Stockport	A
Stockton R.D.	A
Stockton-on-Tees	A
Stoke-on-Trent C.B.	A
Stoke Orchard	A1
Stourbridge M.B.	A
Stourport U.D.	A
Stowmarket	A1
Stratford-on-Avon M.B.	A§
Sunderland District	A
Sunningdale	A1
Sutton Coldfield M.B.	A
Swaffham	A2
Swanage	A1
Swansea	A
Swindon	A1
Swinton U.D.	A
Tamworth M.B.	A
Tenterden	A2
Tewkesbury	A1
Thames Haven	A
Thetford	A2
Thorpe Bay	A
Thurrock U.D.C. Area	A
,, North of, to Billericay	A
Tilbury	A
Todmorden	A
Tonbridge	A1
Torquay	A1
Totnes	A1
Trowbridge	A2
Tunbridge Wells	A1
Tynemouth C.B.	A
Uppingham (Salop)	A1
Uttoxeter U.D.	A2
Wakefield	A
Wallsend B.	A
Walsall C.B.	A
Walsden	A
Walton-on-Naze	A1
Ware	A
Warminster	A2
Warrington	A
Warwick M.B.	A
Wellington U.D.	A
Wells (Norfolk)	A2
Welwyn	A
Welwyn Gar. City	A
West Bromwich C.B.	A
Westbury	A2
Westcliff-on-Sea	A
Westerham	A1
Weston-super-Mare	A1
Weybridge	A
Weymouth	A1
Whitby U.D.	A1
Whitstable and District	A2
Wickford	A
Widnes	A
Wigan	A
Wigton	A2
Willington	A
Wilmslow	A
Wilts. County of	‡A2
Winchester	A1
Windermere	A3
Windsor and Eton	A1
Wisbech	A2
Witham	A1
Woking (District)	A1
Wokingham	A2
Wolverhampton C.B.	A
Woodbridge	A2
Worcester C.B.	A
Workington	A
Worksop M.B.	A
Worthing	A2
Wrexham (incl. Cefn)	A
Wroughton	A1
Wylam	A
Wymondham	A2
York	A

* For Birkenhead, Liverpool and London the rates are:—Craftsmen, 3s. 8d.; Labourers, 3s. 2¾d. In the case of London the rate beyond the 12-mile radius is:—Craftsmen, 3s. 7¾d. Labourers, 3s. 2d. † Plus 2d. per working day. ‡ This is the County rate and applies except where higher grades are stated. § Regraded as from October 5, 1953.

NOTE.—Carpenters, Joiners and Plumbers in all towns and districts receive 2d.per day Tool Allowances.

WOMEN'S RATES.—In all districts throughout the country the rate of wages for women engaged in craft processes is 2s. 7d. per hour. Women introduced to carry out work other than craft processes, 2s. 3d. per hour.

For Building Trade Wages in Scotland see page 524

OVERSEAS BUILDING

[From Our Own Correspondents]

Argentine.—A new programme being launched by the Argentine for its ports and rivers provides for the construction of a number of buildings and port facilities. Producers co-operatives are to be encouraged. Shipyards are to be extended and others are to be planned for the near future to cope with Argentine's rising maritime industry. On the housing front about 22m. pesos are to be reserved for the construction of council dwellings and 16m. pesos are to be invested in social services. A programme has been approved of investments presented by the Provincial Department of Public Works for works to be completed up to a value of 9m. pesos by the end of this year.

Australia.—The Brisbane and South Coast Hospitals Board has accepted a Brisbane builder's £1,226,383 tender to construct the main buildings at the Chermside Tuberculosis Sanatorium, which, when finished, will house 381 patients. Under the Australian Commonwealth and States' tuberculosis agreement the Federal Government will pay the full capital cost of the new structure. Accommodation for 150 nurses will be provided in a seven-storey section and each will have a separate room.

The Chief Stipendiary Magistrate of Brisbane (Mr. Burchill) has ruled that 73 acres of that capital's green belt be thrown open for home building. It is the first time in Brisbane that a large tract of green-belt land has been taken for residential purposes. Mr. Burchill upheld an appeal against the Brisbane City Council's refusal to open the land for building allotments.

Brisbane City Council draughtsmen and designing engineers are preparing plans for a new £2m. Victoria Bridge, over the river Brisbane whose construction will necessitate the widening of Queen-street on the upstream side, from North Quay to George-street; also an extension of Adelaide-street from George-street to North Quay. There will be an underpass under the new bridge extending from the end of Elizabeth-street to the termination of Adelaide-street extension.

Egypt.—A committee met during the month at the Ministry of Health in Cairo, Egypt, to study a project for the erection of a factory to produce condensed milk. This scheme which is being partially financed by the International Fund for Child Welfare has as its object the free distribution to between 15,000 and 30,000 children of a minimum of 40 grammes of half-cream and 30 grammes of full-cream milk daily. Estimated cost of the factory is about £30,000.

The Permanent Council for National Production has invited offers to be submitted by October 31 for the formation of an Egyptian limited company which will be granted a concession for the erection of grain silos in Cairo and Alexandria.

In a report submitted to the National Production Council the Ministry of Commerce and Industry has recommended that serious study be given to the possibility of establishing a shipyard at Alexandria for the construction of ocean-going vessels. It is estimated that the project will cost about £1½m.

Interesting news is that the Administrative Council of the Egyptian State Railways is studying the possibility of erecting a new town near Abu Zabaal to accommodate workers in the workshops there. The project the Council has in mind involves the construction of houses, schools, police stations and provisions for public services, etc., estimated at approximately £2m. It has been suggested that a contract for this project be awarded by adjudication and that the work must be completed within two years. The Council has also suggested that the project be financed by a 20-year loan from the Savings Bank and Insurance Companies.

Malaya.—The Federation of Malaya have announced a 10-year road and bridge building plan which will cost about £21m. It includes a west to east road, to cost three-quarters of the total allocation, which will run 200 miles from Port Swettenham, on the west coast, through Kuala Lumpur to Kuantan, on the east coast. The director of public works said the existing roads on the east coast would be improved to link up with the new road. The road project was expected to be complete by 1961.

New Zealand.—The New Zealand Government has now finalised its plans for the building of an entirely new town and port to extend the country's pulp and paper industries. Cost of building of both towns is in the region of £20m. A 40-mile railway line to the 260,000-acre forest is also being laid for bringing logs to the company's main mills. The towns to be known as Kawarau and Tauranga are being initiated by the Tasman Pulp and Paper Company in co-operation with the New Zealand Government. The company has already placed orders in the UK for more than £4m. and others may follow. Other contracts have been placed in the Scandinavian countries, the USA and Canada. Messrs. Merz and McLellan, the London steam engineering consultants who have been appointed by the New Zealand Government to survey the Wairakei area to examine the possibilities of using geo-thermal steam for the production of electricity and heavy water required for atomic energy development, will probably be asked to report on the utilisation of geo-thermal steam in the production of pulp and newsprint.

The next hydro-electric station to be built on the Waikato River at Atiamuri will provide work for the men now engaged in completing the station at Maraetai. When it is completed it will add 63,000 kilowatts of electric power to the North Island supply. It will be the fifth dam on the Waikato River. The Atiamauri scheme involves the building of a dam 125 feet high and 570 feet long. This will provide an operating head of 80 feet. The Maraetai station officially opened a few weeks ago is the biggest civil engineering achievement in New Zealand. It was designed and built by New Zealanders at a cost of £9½m. Ultimately five generators will be in operation at Maraetai with a total capacity of 180,000 kilowatts.

Spain.—An ambitious plan for the industrialisation of the Jaen Province of Spain has been approved by the Spanish Government. It involves an expenditure of about £150,000 of which more than half will be devoted to hydraulic works and railway improvements. The number of reservoirs in the area is to be increased from four to nine and this will involve a great deal of work. As yet no plans have been made for this work, but the Spanish authorities will have all details. The authorities have also supported a big expansion programme of the steel works operated by Altos Hornos de Vizcaya. At the Sestao plant, four new blast furnaces, a rolling mill and 3,500-ton press are to be installed. At Baracaldo the improvements include three new Bessemer converters, two new Siemens furnaces and eight reheating ovens. Work on these installations is to start in 12 months and to be finished in three years from the date of the award of the contracts. An oil-bunkering depot is under construction at Santa Isabel, the capital of the island of Fernando Po. Port facilities at Cartagena are to be improved at a cost of £300,000 all of which is to be raised by public loan. Five-year plans to extend the ports of Ceuta and Valencia have been announced. A law has been passed recently authorising the expenditure of £3m. to modernise the Spanish narrow-gauge railway system.

A plan has also been approved for enlarging and improving the runways at the civil airports at Barajas, Barcelona, Zaragoza, Palma de Mallorca and Santander.

The Barcelona Municipality has given its authorisation to a plan dealing with urban improvements costing about £50,000. Nearly a million pounds is to be spent on the city's water supply.

Waterproofing Masonry

The valuable properties of the organic compounds known as silicones, which provide a wide variety of products in the form of car polishers, fluids, resins, rubbers, and so on, are becoming more widely known. One of the outstanding properties of silicones is water repellency, which has allowed the development of Tretol External Impregnation—the silicone waterproofer for waterproofing roughcast, brickwork, cement renderings, asbestos cement, concrete and other materials. It is claimed that masonry surfaces correctly treated with this material are extremely difficult to wet, since the water will simply form droplets on the surface and run off. The highly penetrative properties of silicones enable the waterproofer to enter deeply into building surfaces, lining the pores with a water-repellent film without altering the appearance or "breathing" characteristics of the masonry. The waterproofer, which is manufactured by Tretol, Ltd., 12-14, North End-road, NW11, can be easily applied by either brush or spray.

THE SCOTTISH BUILDER

Town Planning Conference

THERE was no service that was so misunderstood and so little understood as planning, said MR. R. LOWRY WEST, Newport, convener of Fife Planning Committee, when he addressed the autumn conference of the Town Planning Institute (Scottish Branch) at Kirkcaldy. "I think there is a great confusion in the minds of many people as to what planning really means," he commented.

"As a result of war-time experiences, planning is being confused with controlling, dictation, and with interference with the liberty of the subject, instead of being recognised for what it really is: the artistic and scientific development of towns and cities."

If justification was required for planning, one had only to look at the mess that was made of industrial towns and cities during the industrial revolution, when a dreadful legacy was passed on to future generations. Part of the planner's job was to undo some of the evils that had been created and to recreate the towns, cities, and countryside so that future generations would look with approval on this work and thank God that the present generation had had the good sense to plan not only for business but for beauty, and not only for houses but for homes.

The president of the institute, MR. S. L. BEAUFOY, chief planning officer of the Ministry of Town and Country Planning, said that for the first time in history planning authorities were required by statute to make a survey, and there was now available a volume of information such as had never been known in the past. It was a "model Domesday Book," and would form the basis of their planning. "To believe we can do without planning and planners is quite ridiculous," he stated, "and it is up to us to demonstrate that town and country planning is the most profitable local government activity there is, provided it leads to good development. It eliminates waste and is the basis of economy."

Delegates to the conference later visited Glenrothes where they made a tour of the development area and inspected plans, drawings and models.

Scots Architect's Visit to USSR

THE VAST SCALE of projects and the speed with which great buildings were being erected was the first impression that the visitor to the Soviet Union had, said MR. F. P. TINDALL, County Plannning Officer for East Lothian. Mr. Tindall was a member of a delegation of eleven British architects which has recently visited the USSR. It was the first delegation of architects ever to visit Russia from beyond the Iron Curtain.

"We had various criticisms to offer Soviet architects on the planning and style of architecture adopted, which we felt was rather pompous and out of keeping with the life of the times," Mr. Tindall told a representative of *The Builder*. "The chief Soviet architect, Rudniev, accepted some of the criticisms, and felt that nothing but good would come from the further exchange of opinions between Russian and British architects.

"We were tremendously impressed by the growth of Russian heavy industry and especially the mechanical resources behind the building industry. In many ways it would appear that their heavy industry has outstripped their light industry and the finish and equipment of the buildings were not as good as the best work in this country."

The delegation spent three weeks in the USSR.

Georgian Mansion's Fate

THE FORMER Georgian mansionhouse of David Dale, eighteenth-century Scottish industrialist and philanthropist, is likely to be pulled down to permit the extension of an adjacent Roman Catholic School. A subcommittee recommendation that it should be demolished is to come before Glasgow Town Council. This Glasgow house, which was built in 1783, at a cost of £6,000, overlooks Glasgow Green at the corner of Greendyke-street and Charlotte-street, and is in a very dilapidated state.

When it was first suggested some months ago that the building should be demolished there were protests from various cultural bodies led by the Old Glasgow Club and the Saltire Society. The representative committee, wishing to preserve it because of its architectural features and associations, was agreed that it would take at least £10,000 to restore it and a much greater sum if it was to be converted to some useful purpose.

Future Housing Problems

ONE of the main future housing problems would be the acquisition of building sites, said COMMANDER T. D. GALBRAITH, Joint Under-Secretary of State for Scotland, when he met representatives of Dumbarton Town Council on a recent tour.

He felt that the time might be near when local authorities should be considering slum clearance and redevelopment in the central areas. The other main problem ahead was building costs. At the present rate of building the additional charge on the Exchequer each year would amount to £1½m. in Scotland alone. The new 1953 housing designs did offer, however, a real prospect of getting building costs down. But there was need for local authorities to interpret their by-laws flexibly.

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SCOTTISH BUILDING TRADE WAGES

FOLLOWING are rates of wages authorised by the Scottish National Joint Council as from February 2, 1953. They apply to the whole of Scotland, including the islands of Orkney, Shetland, etc.

Grade A: Craftsmen, 3s. 6½d.; Labourers, 3s. 1d.

For apprentices, the rates are:

Year.	*Percentage of Craftsman's rate.*	*For week of 44 hours.*
		s. d.
1st	25	38 11½
2nd	33½	51 11½
3rd	50	77 11
4th	66½	103 10½
5th	75	116 10½

For female labour, the rates are:

	s.	d.
Operatives on craft operations (at end of probationary period)	3	1
Operatives on labouring operations (at end of probationary period)	2	9½

Commander Galbraith told of a visit he had paid to a factory making articles for house interiors. The firm concerned were trying to standardise production but had had to manufacture 50 different specifications because of variations in local by-laws.

Slow Housing Progress

MEMBERS of Berwickshire Planning, Property and Works Committee, at a recent meeting at Duns, were told of slow progress on housing schemes in certain parts of the county.

The council's architect, MR. J. HALL, said that all contractors had been approached about the obvious lack of progress. It was a story of promises all round.

BRIGADIER A. H. C. SWINTON, the chairman, suggested establishing a black list. There were certain contractors who were not playing the game and he would be against giving them any more work.

The County Clerk was instructed to inform the contractors of the committee's feeling on the question.

Scottish Painters' Resolution

THE Scottish Painters' Society, at their meeting in Arbroath on September 19, adopted a resolution put forward by the Dundee Branch of the Society, calling for more inside work in winter to avoid unemployment.

The resolution requested the executive council to encourage the Government, local authorities, public bodies and the public to have more inside work done in December, January and February.

East Kilbride Progress

EAST KILBRIDE is now claiming a leading place in building among Local Authorities in Scotland. In a statement, Sir Patrick Dollan stated that the new town Development Corporation had 1,489 houses under construction, and that only a few of the large towns, cities, and counties were exceeding the town in production effort. He reported that the Development Corporation had also approved of contracts for 275 houses on which work will begin at an early date. It is planned to add a further 1,000 houses next year to the total of 1,183 already completed and occupied.

Aberdeen Housing

A TOTAL of 105 houses were completed by Aberdeen Corporation and 18 by the Scottish Special Housing Association in the

city last month, it was reported at a recent meeting of the housing committee. This brought the total for the year to date to 748 houses, and there are reasonable prospects of the year's target of 1,005 houses being reached.

NEW BUILDINGS

Ayrshire.—Plans to be prepared for a new bank for the Royal Bank of Scotland, Ltd., to be erected at Main-st., Largs. The architects are Grattan & MacLean (F), 21, Woodside-ter., Glasgow.

Clydeholm.—Barclay Curle & Co., Ltd., Whiteinch, Glasgow, are to spend £2m. on the conversion of their Clydeholm yard to modern techniques. The first stage, costing £500,000, will commence when licences are granted.

Edinburgh.—Dean of Guild Court granted warrant for the erection of 32 houses and five shops in the Morocco Land area in the Canongate, subject to consent by the Town Planning Committee. To William McEwan & Co., Ltd., warrant was granted to demolish a two-storey building and erect a three-story building at Fountain Brewery, Fountainbridge. The new premises will be an extension of bottling stores, etc., and the cost will be £19,700. The Scottish Orthopædic Council were authorised to carry out alterations to provide workrooms, office and other accommodation at "The Elms," Whitehouse Loan, at a cost of £17,200.

Edinburgh.—Housing Committee has approved in principle the layout, etc., for a total of 1,330 houses in blocks of eight and ten storeys which will be erected at Muirhouse. Road work is expected to start by February and the site should be ready for work to begin on the £2,280,000 project in July. It will take two to three years to complete.

Edinburgh.—Town Council is to purchase the 300-year-old Tron Church from the Church of Scotland for £12,500 and to adapt the building for civic purposes at a further estimated cost of £9,250. The adaptations will include the introduction of a new floor at gallery level to provide a main hall and the sub-division of the ground floor into a smaller hall with retiring rooms, etc.

Glasgow.—Plans in hand for Scribbans-Kemp & Co., Ltd., for new buildings, etc., which are to be erected at their Sunshine Bakery, Paisley-rd., Govan, for which the architects are Frank Boston, Burnet & Bell (F&A), 180, Hope-st., Glasgow.

Glasgow.—Plans in hand for the Sisters of The Bon Secours de Paris for alterations and additions at Mansionhouse-rd., Shettleston. The architects are Whyte and Nicol (F), 31, North Frederick-st., George-sq., Glasgow.

Glasgow.—Plans to be prepared for alterations and additions at the Candleriggs, for which the architect is R. W. Rogerson, 62, Queen Victoria-dr., Kelvinside, Glasgow, WC4.

Glasgow.—Plans in hand for alterations and additions for St. Aloysius College at Camphill-ave., Langside, for which the architects are Gillespie, Kidd & Coia (A), Wellington-chbrs., Waterloo-st., Glasgow.

Glasgow.—Plans to be prepared for new engineering department, etc., for which a large Castlemilk site has been selected. Plans in the hands of the Government Surveyor's Department, Edinburgh.

Greenock.—Plans in hand for alterations and additions, est. to cost £14,000, for Lahore & Ferguson (L. and F.), Ltd., Upper Ingleston, Greenock.

Lanarkshire.—Plans in hand for 12 houses to be erected at Firhill-ave., and Barrhead-rd., Firhill, for the Cowglen Hospital. The architects are the Engineering Department Scottish Command, Edinburgh.

Lanarkshire.—Plans in hand for scheme of alterations and additions, est. at £20,000, for Dr. Barnardo's Home at Coltness House, Motherwell-Wishaw. The architects and quantity surveyors are H. Hall (A), A. E. Homes, 15, Stepney Causeway, London, E1, and Wilson & Lowe, ARICS, 268, West George-st., Glasgow.

Newbattle.—Plans to be prepared for the Scottish Special Housing Association, Ltd., for scheme of 234 houses for which the architect is J. Austin Bent (A), 15-19, Palmerston-pl., Edinburgh.

Stirlingshire.—Plans in the hands of the architects of I.C.I. (Dyestuffs), Ltd., for new buildings to be erected at an est. cost of £22,110 at Earls-rd., Grangemouth.

The Builder

FUTURE CONSTRUCTION

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

OCTOBER 7.

*† **Wandsworth MBC.**—12 houses on Trinity-rd. site. TC.

OCTOBER 8.

*† **Gateshead BC.**—100 flats and 96 maisonettes at Barn-cl. BS. Dep. £5 5s. Tenders by November 3.

OCTOBER 9.

*Salford City C.—New bathroom extensions to 34 houses at Seaford-rd. estate. City E. Dep. £2 2s.

OCTOBER 12.

*† **Birmingham City C.**—Seven dwellings, Brays-rd., Sheldon. City E&S. Dep. £2 2s.

*† **Birmingham City C.**—Fire station and three houses at Garretts Green-la., Sheldon. City E&S.

*† **Burnley BC.**—Superstructure of Heasandford county secondary school. BE&S. Dep. £5 5s.

*† **Chester City.**—Part I of College of Further Education. City E&S. Dep. £2 2s.

*† **Portsmouth City C.**—82 houses at Billy Town, Leigh Park. City A. Dep. £3 3s.

OCTOBER 14.

Manchester City C.—Repairs and adaptations at Great Moreton Hall, Astbury, Congleton, Cheshire. City A, Town Hall. Dep. £1 1s.

*† **Norfolk EC.**—New school house at Tunstead county primary school. Chief Ed. Officer, Norwich.

*† **Norfolk CC.**—Police stations at Hunstanton and Sheringham. County A., Norwich. Tenders by November 10.

OCTOBER 15.

Builth Wells UDC.—12 houses on Pendre housing site. M. Williams, clerk, Council Offices, Cloverly, Builth Wells. Dep. £3 3s.

OCTOBER 16.

*West Riding Standing Jt. Com.—Messroom and office accommodation at Goole Div. Police HQ. County A., Wakefield.

OCTOBER 19.

*† **Burnley CB.**—Canteen, St. John's RC primary school. BE&S.

Preston CBC.—34 flats at Garnull-la., Ribbleton. BE&S. Dep. £2 2s.

*Sheffield City C.—208 dwellings on Greenhill estate, scheme 4. City A. Dep. £2.

*Woking UDC.—Convenience at High-rd., Byfleet. E&S.

OCTOBER 20.

Aylesbury RDC.—11 dwellings at Quainton housing site. R. C. White, architect, 4, Temple-sq., Aylesbury. Dep. £3 3s.

*Bournemouth BC.—24 houses in West Howe estate, contract WH24. Boro' A. Dep. £2 2s.

Hucknall UDC.—100 houses at Ruffs Farm housing estate, stage VI. E&S, Council Offices, Watnall-rd., Hucknall. Dep. £2 2s.

OCTOBER 23.

Hartismere RDC.—Two pairs of houses and one block of four houses with lay-by and public footpaths at Stradbroke. H. Spindler, Housing Officer, Housing Dept., Lambseth-st., Eye. Dep. £2 2s.

OCTOBER 24.

*† **East Ham CB.**—Erection of 90 flats at Ingave, near Brentwood. Chief Housing Officer. Dep. £5 5s.

*March UDC.—20 bungalows at Elliott-rd. W. Pickett, MIMunE., Town Hall. Dep. £2 2s.

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*Ripley UDC.—Alterations to Council Chambers at Town Hall. H. Hillier, S. Dep. £1 1s.

OCTOBER 26.

*Dagenham BC.—54 houses and 15 garages at Marks Gate estate. BE&S. Dep. £2 2s.

*Epsom and Ewell BC.—26 houses, Hook-rd. N. Auty, BE&S. Dep. £3 3s.

*Lincoln CC.—Police house and office at Swinderby; also at Skellingthorpe. One pair police houses and garage at Byards Leap, Cranwell. County A., Sleaford.

OCTOBER 27.

Barnstaple RDC.—Seven houses at Bratton Fleming. A. J. Dennis, surveyor, Red House, Castle-st. Dep. £2 2s.

Ilford BC.—Public convenience at Oakfield-rd. BE. Dep. £2 2s.

*Ilford BC.—12 flats and six garages at Maypole estate (phase II). BE&S. Dep. £5 5s.

OCTOBER 29.

*Berks CC.—Secondary modern school at Springfield-rd., Wantage. County A, Reading. Dep. £2 2s.

Isle of Man Local Government Board.—Erection of 34 houses at Janet's Corner in the parish of Malew. Douglas Calder, architect to the Board, Murray House, Douglas. Dep. £2 2s.

NOVEMBER 2.

Barnsley CBC.—Extensions to abbatoir in Pontefract-rd. BE. Dep. £2 2s.

Hartley Wintney RDC.—72 houses and bungalows in two contracts on the housing estate, Hook. E&S, Council Offices.

NOVEMBER 4.

*Weymouth and Melcombe Regis BC.—Two temporary shops at junction St. Thomas-st./St. Edmund-st. BE&S. Dep. £1 1s.

NOVEMBER 18.

*Southwick UDC.—116 houses at Downs estate. E&S. Dep. £3 3s.

NO DATE.

*Ongar RDC.—10 aged person's bungalows at Shelley. E&S. Dep. £2 2s.

PAINTING, ELECTRIC LIGHTING, MATERIALS, ETC.

OCTOBER 7.

*† **Glenrothes Dev. Corpn.**—Fireplaces and ironmongery for 820 houses on Auchmuty Second Housing Development. Chief A., Glenrothes, Fife.

OCTOBER 12.

Wrexham BC.—E&S. (Materials.)

OCTOBER 23.

*Walthamstow BC.—Demolition of properties, The Drive area. Boro' A, E&S.

OCTOBER 31.

*Weymouth and Melcombe Regis BC.—External redecoration and re-roofing of Ritz Theatre. BE&S. Dep. £1 1s.

NOVEMBER 7.

New Windsor RBC.—Materials for 1954. BE.

ROADS, SEWERAGE AND WATER WORKS

OCTOBER 12.

†**Colne Valley Water Company.**—No. 5 reservoir at Bushey Heath, nr. Watford. John Taylor & Sons, consultant engineers, Artillery House, Artillery-row, Victoria-st., Westminster, SW1.

OCTOBER 20.

Ledbury RDC.—Laying of water mains and construction of service reservoir in the parish of Wellington Heath, Herefordshire. Richards & Dumbleton, chartered civil engineers, 45, Newhall-st., Birmingham, 3. Dep. £3 3s.

OCTOBER 28.

Walsall CB.—Roads and sewers on the Mossley estate. BE&S, Council House. Dep. £2 2s.

NOVEMBER 2.

Newmarket UDC.—Pumping station, r.c. pump well, sump, screening chamber and channel, with sewers and main. E&S. Dep. £2 2s.

NOVEMBER 3.

Hartismere RDC.—Laying of water mains, etc., to serve the parishes of Brome, Thrandeston, Redgrave and Monk Soham. W. Herbert Bateman & Partners, consultant engineers, Halifax House, Bank Plain, Norwich, Norfolk. Dep. £3 3s.

NOVEMBER 13.

Derby CBC.—Modifications to storm water tanks, contract No. 5. J. D. & D. M. Watson, MM.ICE, 18, Queen Anne's Gate, Westminster, SW1. Dep. £10 10s.

GENERAL BUILDING WORK (LONDON)

Battersea.—FLATS.—Artizans Housing Association, Ltd., propose to build 12 flats on a bombed site in Brassey-sq.

City.—OFFICES.—Proposals have been made by Site Improvements, Ltd., 1, Queen Anne's Gate, SW1, for the erection of office premises on the site of Nos.

59-67, Gresham-st., EC2. The architects for the scheme are Sir John Burnet Tait & Ptnrs. 10, Bedford-sq., WC1. The quantity surveyors are Gardiner & Theobald, 49, Bedford-sq., WC1, and the work will be carried out by Holland & Hannen and Cubitts, Ltd., bldg. contractors, 1, Queen Anne's Gate. SW1.

City.—WAREHOUSE AND OFFICES.—The erection of a warehouse and offices in Chiswell-st. is proposed by Goode, Durrant and Murray, Ltd., 197, Great Portland-st., W1.

Dagenham.—FLATS AND SHOPS.—BC are recommended to approve sketch plans submitted by BS for seven shops with 14 flats over for erection at Rainham-rd. South.

Dagenham.—FACTORIES.—BC has approved the erection by the following companies of factories on the Hainault Industrial Estate:—Mica and Micanite Supplies, Ltd., Mica House, Barnsbury-sq., N1; Bendas and Bendas, Ltd., 1, Helens-pl., E2; and Harmer and Simmons, Ltd., 1, Arkley-rd., E17.

Dagenham.—DWELLING HOUSES.—TP permission has been given to proposals by the Roding Development Co., bldrs., 645, Green-la., Goodmayes, for the erection of five dwelling houses in Adelaide-gdns.

Dagenham.—LABORATORY EXTENSIONS.—Proposals made by May and Baker, Ltd., for extensions to their research laboratory at Rainham-rd. South have received TP consent.

Dagenham.—FACTORIES.—Erection of two factories proposed by Hallam Metals, Ltd., at Selinas-la. has been given TP approval.

Dagenham.—SYNAGOGUE.—TP consent has been given to proposals by United Synagogue, Woburn House, Upper Woburn-pl., WC1, for the erection of a synagogue and community hall in Huntsman-rd.

Fulham.—SITES ACQUISITION.—MH & LG has confirmed compulsory purchase orders for the acquisition by MBC of Nos. 19a and 19b, Darlan-rd. MBC also propose to acquire sites of Nos. 8, 13 and 15, Fane-st.; Nos. 39-55, Star-rd.; Nos. 26 and 28, Auriol-rd.; Nos. 10 and 12, Byam-st.; Nos. 35, 39, 42-45, and 53, Mulgrave-rd.; and site of North End school for housing purposes. The last will be part of Lillie-rd. (South) area scheme. "The Grange." North End-cres., has been purchased as part of future "Samuel Richardson House" housing estate.

Ilford.—OFFICES.—Scheme is being prepared by Porte and Ptnrs., architects, 16, Devonshire-sq., EC2, for the erection of an office block at 290-296, High-rd.

Ilford.—HOUSES.—Stoneley & Co., Ltd., 258, Green-la., propose the erection of 33 houses in Eastern-ave.

Ilford.—FACTORY EXTENSIONS.—Proposals have been made for the erection of a hardening shop and switchgear house at Essex Works, Ltd., High-rd.

Ilford.—PUBLIC BATHS.—BC propose the erection of public baths in Barkingside.

Lambeth.—FACTORY, OFFICES AND WAREHOUSE.—Chamberlain Industries, Ltd., Staffa-rd., E10, propose the erection of a factory, offices and warehouse in Wandsworth-rd.

Lewisham.—SCHOOL.—The architects for a proposed RC secondary school at Belmont Hill are Clayton and Black and Ptnrs., 10, Bayley-st., WC1.

Leyton.—OFFICES.—By-law permission granted to Daywear, Ltd., for the erection of a new office at their premises 214, Cann Hall-rd., E11.

Leyton.—FACTORY EXTENSIONS.—Proposals by R. P. Sharman, ARIBA, 55, Queen Anne-st., W1, for the extension of the factory of J. Berry & Sons in Lammas-rd., E10, have received by-law approval.

Leyton.—SHOWROOMS.—Extension to existing showrooms at 285, High-rd., E11, proposed by Harrow Furnishing Stores has received by-law permission.

Shoreditch.—HOLIDAY HOME.—BS is to prepare plans for the erection of two wings as extensions to the Copthorne Holiday Home, to provide additional bedroom accommodation.

Wimbledon.—SCHOOL.—Surrey CC propose to erect a primary school on part of the Garfield-rd. recreation ground.

Wimbledon.—HOUSING.—BC propose to acquire by compulsory purchase site of 62-64, Wandle-rd., and lands at Plough-la. totalling approximately 4½ acres for housing development.

Wood Green.—DEVELOPMENT.—BE is to prepare sketch plans showing the proposed development of land at the corner of Granville-rd. to be part of the Granville-rd. and Lordship-la. site.

Wood Green.—FLATS.—BE has submitted sketch plans for the erection of four flats on each of three sites comprised in the Wood Green (Grosvenor-rd.) compulsory purchase order.

Wood Green.—APPOINTMENT.—Hsg. Com. recommend the appointment of Vine and Vine, AA.RIBA, 12, Tudor-chbrs., Station-rd., N22, as architects for the development of New-rd. and Granville-rd. sites.

(PROVINCIAL)

Accrington.—TC recommended to approve scheme for 84 flats in 21 blocks on Burnley-rd. site No. 2.

Amble.—UDC approved erection of 50 houses on Links estate. S, A. Livesey.

Atherton.—UDC to erect 106 houses on site north of railway from Atherton Central Stn. to Daisy Hill.

Belper.—RDC propose 20 more houses on Parks-ave. site, South Wingfield.

Blackburn.—TC approved plans for extensions to factory for Mullards, Ltd.—To negotiate with Gregory Construction, Ltd., for 36 flats at Shadsworth estate.

Blackburn.—Old Age Pensioners' Assoc. to erect social centre at St. Andrew's-st. on site of demolished Unitarian Church.

Blyth.—C. Solomon, 30, St. Mary's-pl., Newcastle-on-Tyne, architect for proposed showrooms in Bowes-st., for Hardy & Co., Clayton-rd., Newcastle-on-Tyne. —Min. of Works to erect telephone exchange in Marine-ter.

Brighton.—TC to build eight firemen's cottages on site bordering Roedean-rd. and The Avenue, cost £12,500 (est.).—Chichester Diocesan Authority to build church at site on Brighton Hollingdean estate.—Kemp Town Brewery (Brighton), Ltd., to build licensed premises within 12 months at Lower Bevendean.—TC to build factory at Lower Bevendean light industrial area for Brighton Service Plating Co., Ltd. —TC to build block of eight flats at junction Upper and Lower Bevendean-aves., to cost £9,039 (est.).

British Railways.—BR (Eastern Region) propose to extend existing Liverpool-st./Shenfield electrification to Chelmsford and to Southend (Victoria) at total cost of about £2½m. New mileage to be electrified will be over 30 miles in all, and forms part of a general programme for improving railway facilities between London and Essex residential areas. Further proposals include electrification from Fenchurch-st. to Tilbury and Southend (Central), including the reconstruction of Barking Station, rearrangement of tracks with flyover, and new marshalling yard.

Bromsgrove.—UDC to invite tenders in December for further 132 houses at Charford estate.

Bury.—TC S to prepare layout for erection of crematorium in south-east corner of cemetery.—EC received approval for erection of Brandlesholme cty prim. sch. in 1954/5 programme. Plans by J. Chadwick.

Bury.—Allen's, Union-st., purchased the Ben Mill, Heap Bridge, and propose modernisation and extensions.

Caraforth.—UDC received permission to erect 44 houses up to the end of year and to start further 26 in January.

Chadderton.—Lancs CC propose additional science rooms at Chadderton North and Chadderton cty. sec. schs., £9,285 est.—Work to commence during next two months on new library at junction Whitegate-la./Broadway.

Chapel-en-le-Frith.—Parochial Church C propose restoration scheme for church.

Cheadle (Staffs).—RDC propose erection of further 100 houses in 1954.

Chester-le-Street.—UDC to build 40 houses and 12 flats in Jacques-ter. Plans by S.

Chorley.—TC received approval for erection of 79 houses and 12 flats at Liptrot Farm estate.

Cockermouth.—UDC to erect flats on site of old workhouse. S, M. M. Dixon, Town Hall.

Creswell.—National Coal Brd. propose further 250 houses between Creswell and Whitwell.

Darlington.—MoE approval received for Haughton sec. mod. tech. sch., 600 places (£190,360); Arthur Pease prim. sch. (£44,044).—TC approved plans for showroom in Grange-rd. for Motor Delivery Co., Ltd.

Daventry.—RDC propose six houses at Lilbourne, four at Barby, 11 at Flore, and 12 at Woodford Halse.

Durham.—CC plan erection of sch. clinic at Aykley Heads. Cty. A, G. R. Clayton, Court-la.—Cordingley & McIntyre, The College, Durham, architects for church hall at Auton Stile.—Plans prepared by Tasker & Child, Trinity-bldgs., New Bridge-st., Newcastle, for factory alterations at Dragon-la., Belmont, for Richmond Sausage Co.

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Ellesmere.—UDC propose new housing site on Oswestry-rd.

Gateshead.—Corp. shortly to invite tenders for building of 10- and eight-storey blocks of flats at Barn-cl. estate. Plans by BS, G. F. Winters.

Hebburn-on-Tyne.—Amended plans prepared for new stores in Victoria-rd. West, for Jarrow & Hebburn Co-op. Soc. CWS Architects' Dept., 90, Westmorland-rd., Newcastle-on-Tyne.

Houghton-le-Spring.—UDC received MH&LG approval of plans for 22 houses on Fence Houses estate and 16 on Racecourse Extension. Work will be done by direct labour.—Revised plans prepared for council depot behind Market-pl.—UDC to consider alternative plans for proposed public hall. W. H. Smith, UDC S.

Hull.—Ravenseft Properties, Ltd., propose to develop a blitzed site at corner of Jameson-st. and Prospect-st. by erection of large store, 4-storeys high, and other buildings 2- and 3-storeys high.

Keighley.—Central Office of Inf., East and West Ridings Region, report that approval given for first stage of rebuilding of paper-tube factory destroyed by fire.—Walter Burgess, Ltd., Hanover-st., purchased adjoining property for large extensions to garage premises.

Lancs.—EC received approval for following schools in 1954 programme:—Swinton, Worsley Cty. Grammar; Worsley Mount Skip Cty. Sec.; Middleton Langley RC Sec.; Middleton Langley RC Sec. (Phase II); Middleton Langley Cty. No. 2 Phase I; Eccles Peel Green RC Sec.; Ashton-under-Lyne Hartshead Cty. Sec. and Stretford Gorse Hill Cty. Sec. for Boys; Leyland RC Sec.; Ormskirk RC Sec. Phase I; Thornton Cty. Inf. and Jun.; Rainhill Ivy Farm Cty. Inf. and Jun.; Kirkby South Cty. No. 2; Kirkby South RC No. 1, Phase II; Kirkby South RC No. 2 Inf. and Jun.; Kirkby South RC Sec.; Huyton-with-Roby Brookhouse St. Aidans RC Inf. Phase I; Knowsley Stockbridge-la. Cty. Sec.

Leeds.—TC approved plans for rebuilding war-damaged front of City Museum.

Maryport.—Newcastle Reg. Hosp. Board propose out-patients department at Cottage Hospital.

Middlesbrough.—Extensions proposed to Middlesbrough Motor Club, Clarendon-rd.

Newcastle-on-Tyne.—Detailed plans to be prepared by City A, 18, Cloth-market, Newcastle, for second stage of £600,000 Rutherford College of Technology scheme. QS, R. H. Duns, Lambton House, Lambton-rd., Jesmond, Newcastle.—Page, Son & Hill, 75, King-st., South Shields, architects for proposed conversion of premises in Hood-st. into warehouse and showrooms, for A. J. Wares, Ltd., builders' merchants, etc.—City C received sanction to capital expenditure of £200,000 on building of houses and blocks of flats. Plans by City A.—City C to go ahead with 21 flats in three-storeys in Cheltenham-ter. and Guildford-pl. Plans by City A, G. Kenyon, 18, Cloth-market.

Northwich.—RDC to go ahead with erection of houses on Anderton site.

Penrith.—Negotiated prices for erection of 20 houses for RDC have been approved by MH&LG. Builders, Armstrong & Son, Sandgate House, Penrith, for six houses at Plumpton, and J. Kitchen, Lowther-st., Penrith, for 14 houses at Little Salkeld.

Ponteland (Northumberland).—Funds being raised for proposed extensions to Ponteland Methodist Church, estimated cost £10,000.

Prudhoe-on-Tyne.—UDC to demolish village of West Wylam and build new houses with sites for shops, churches. Council A, J. Angus, Levaine-pl., Newcastle-on-Tyne.

Rhyl.—Development of water supply for Rhyl at cost £137,000, approved by Council.

Rochdale.—RC authorities propose church at Mornington-rd., Kirkholt Estate. Licence expected next month.

Rothbury.—Shops and business premises of Tweedside Co-op. Soc. to be demolished and rebuilt. Architects, Reavell & Cahill, Lloyds Bank-chbrs., Alnwick.

Scarborough.—TC to place contracts with five local builders for erection of 274 houses on Eastfield estate, but work on only 65 will be commenced this year.—TC to build 18 houses and flats in North-ter. Gardens clearance area.—TC received loan sanction £56,977 for erection of 44 houses at Eastfield by A. Schofield (Builders), Ltd.—Wilkinson, Smith & Brittlebank, Martins Bank-chbrs., Westborough, architects for factory in Seamer-rd. for Quartons (Scarborough), Ltd.—Sportocraft, Ltd., Castle-rd., to build factory in Castle-rd.

South Shields.—New factory to be built at Mill Dam, South Shields, for J. Newman & Co. Architects, Ballard, Cotton & Blow, Haymarket House, Newcastle-on-Tyne.

Stafford.—BC approved plans: 13 houses adjoining Crispin Inn, Stone-rd., for F. Espley & Son, Ltd., South-st., Stafford; new church hall for trustees of St. Austin's RC School.—Received approval for erection of 14 dwellings off Highfields Estate.—To acquire site adjacent to Cambridge-st. and Tithe Barn-rd. for housing purposes.

Staffs.—South-West Divisional EC approved site for comprehensive school off Mill-st., Brierley Hill.

Stratford-on-Avon.—TC to negotiate with Smith & Unett for erection of 18 houses and 6 bungalows at Tiddington.

Sunderland.—G. H. Brown & Son, 53, Fawcett-st., architects for alterations in Chester-st. West, for Northern Laundry, Ltd., and for layout of Red House

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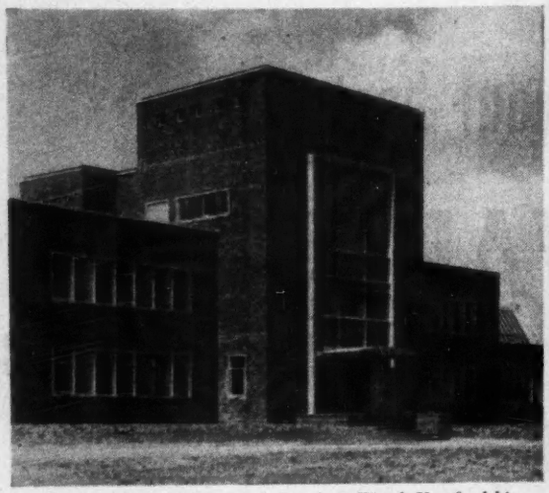
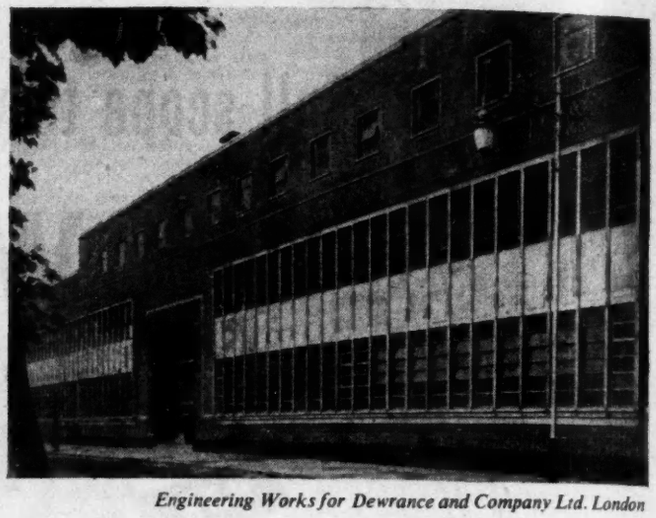


Factory for Adhesive Tapes Ltd. Boreham Wood, Hertfordshire



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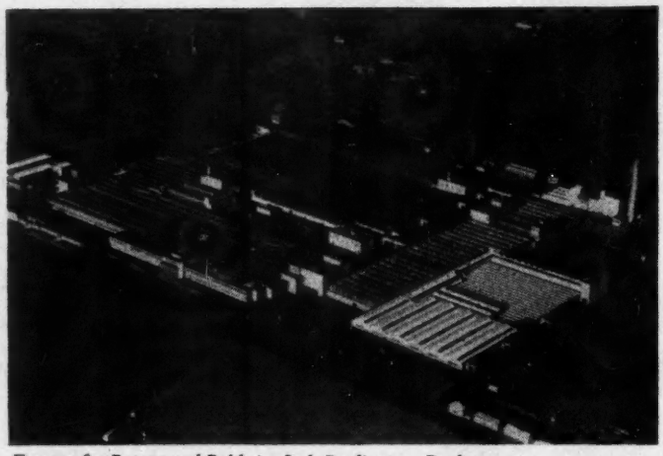

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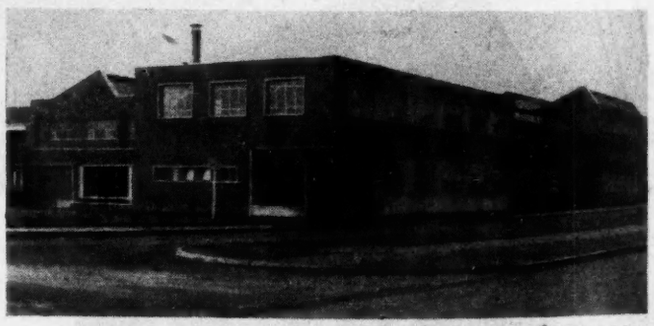

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housing estate.—Matkin & Hawkins, Barclays Bank-chbrs., Fawcett-st., have prepared plans for six bungalows in Longridge-sq. for J. Prentice, builder.

Thorne (Yorks).—RC received Min. permission to start site works for 32 houses at The Grange, Hatfield.

Tynemouth.—J. W. Taylor & Son, St. James'-bldgs., Gallowgate, Newcastle-on-Tyne, architects for factory, offices, storage accommodation, canteen and assembly shop at North Shields, for Albert Edward Dock Sawmills, Ltd.—Outline plans prepared by G. E. Charlewood, 14, Neville-st., Newcastle-on-Tyne, for church and church hall at Billy Mill-la./Whitehouse-la., North Shields, for St. Peter's Church, Balkwell.—Tasker & Child, Trinity-bldgs., New Bridge-st., Newcastle-on-Tyne, prepared plans for changing and wash-rooms, canteen and office accommodation at Low Lights, for North Shields Fish Meal & Oil Co., Ltd.—TC to proceed with building of 80 houses at Murten Grange. Plans by BS.—TC to erect another 800 houses over period of five years. Present programme providing for 2,700 houses will be completed next year. BE, D. M. O'Herlihy, 16, Northumberland-sq., North Shields.

Warrington.—BC approved church and Sunday school at Orford Estate. Architect, C. D. McIntosh, 12, Winmarleigh-st.

Warrington.—M of E approved rebuilding of St. Anne's School. Work to commence early next year.

Washington (Co. Durham).—UDC to let contract for repairs to 107 council houses at Usworth. Plans by S.

West Hartlepool.—MoE agreed to include in next year's building programme scheme for rebuilding of St. Joseph's RC sch. Boro' A, A. G. Sinclair, Municipal-bldgs., West Hartlepool.

West Riding.—EC appointed Yorke, Rosenberg & Mardall, 2, Hyde Park-pl., W2, architects for new sec. sch. at Sponley Outwood; Farquharson & McMorran, 14, North Audley-st., W1, as architects for new sec. sch. at Crigglestone; and Scherrer & Hicks, 19, Cavendish-sq., W1, as architects for sec. sch. at Thrybergh.

Whitby.—RDC S, H. D. Stanworth, to prepare plans for four houses on Meadowfield site.

Whitchurch (Salop).—UDC to erect 60 houses on Smallbrook housing site.

TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government Departments*.

Aberdeen.—New Cilcomston Park bus stn. at Upper Denburn, for Corp. Alexander B. Gardiner (F), architect, Council Housing Offices, Broad-st., Aberdeen: *William Alexander & Sons, Ltd., Aberdeen.

Blaydon-on-Tyne.—Erection of four shops and flats and garages at Chopwell, for UDC. Plans by the Hsg. A, Council Offices: *Direct Labour (approved by Ministry).

Brighton.—Block of nine flats for TC, in Park Crescent-ter.: *Knight Bros. (Brighton), Ltd., £12,532.

Brighton.—11 terraced houses in Essex-st., for TC: *Prospect (Eastbourne), Ltd., £17,811.

Brighton.—Four shops and flats at South Woodingdean, for TC: *John W. Ridge, Ltd., £15,173.

Daventry.—10 houses at Kilsby, for RDC: *Cockerill & Griffin, Barby, £13,052.

Durham.—Construction of housecraft room at Highfield cty. sch., for CC. Cty. A, G. R. Clayton, Court-la., Durham: *J. G. Faldon, Blaydon-on-Tyne, £5,068.

Fulham.—Extension of William Banfield House by the construction of another 10 flats abutting on Munster-rd. and involving the completion of the estate road and the children's playground, for BC:

Patman and Fotheringham, Ltd., N1	£21,251
Tersons, Ltd., N3	20,417
F. G. Minter, Ltd., SW1	20,270
Leslie & Co., Ltd., W8	19,940
Rowley Bros., Ltd., N17	19,862
William Willett, Ltd., SW1	19,645
Director of Housing and Public Buildings	18,790
W. J. Marston & Son, Ltd., SW6	18,495
‡Taylor Woodrow, Ltd., 10, Park-st., W1 (After arithmetical correction.)	17,269

Fulham.—Construction of five flats and ten maisonettes on the sites of Nos. 2-20, Basuto-rd., for BC:

V. V. Slater and Coker, Ltd., W14	£31,106
W. J. Marston & Son,, Ltd., SW6	30,534
Director of Housing and Public Buildings	29,987
E. J. Lacy & Co., Ltd., NW10	29,496
A. H. Franklin & Sons, SW6	29,461
Swan Bros. (Fulham), Ltd., SW6	29,350
Cannon and Roaf, Ltd., Carshalton, Surrey	28,660
W. W. Rowney & Co., Ltd., SE1	28,495
‡Geo. S. Garner & Son (Builders), Ltd., 106, Greyhound-rd., W6	27,456

Hale.—67 houses at Delahaye-rd. housing estate, Section 1, for UDC. D. C. Holland, AMIMunE, acting E&S, Council Offices, Ashley-rd., Hale, Cheshire: *D. Franklyn, 2, Midland Bank-chbrs., Station-rd., Urmston, Manchester, £98,475.

Hartismere.—Two bungalows and four houses, with site works, on Wyverstone housing site, phase 3, for RDC. H. Spindler, Housing Officer. Quantities by Parmenter, Caston & Porrett: *C. H. Comber, Bungay-rd., Scole, Norfolk. Houses, £8,131; siteworks, £64.

Islington.—70 dwellings on the Mildmay centre site, Newington Green-rd., N1, for BC. E. C. P. Monson (A&A), architects, 120, Moorgate, EC2. Quantities by O. E. Parratt, FRICS:—

Halse & Sons, Ltd., 5, Chapel-hill, Woolwich, SE18	£157,229
J. Jarvis & Sons, Ltd., 239, Vauxhall Bridge-rd., SW1	156,317
Dove Bros., Ltd., Cloudesley-pl., N1	155,789
Gee, Walker & Slater, Ltd., 100, Park-la., W1	152,789
*Rowley Bros., Ltd., Tower Works, Dunloe-ave., N17	152,702

(Subject to all necessary consents and to contract.)

Jarrow-on-Tyne.—Construction of deep-water berth about 500 ft. long in Curlew-rd., for the Mercantile Dry Dock Co., Ltd., Jarrow. Engineers, R. T. James & Partners, 1, St. Nicholas-bldgs., Newcastle-on-Tyne: *Peter Lind, Ltd., Stratton House, Piccadilly, London, W1.

Kilmarnock.—Erection of flatted houses at The Onthank area site, for Corp. N. S. Sutherland, FIAA&S, architect, Master of Works Office, Municipal-bldgs., Kilmarnock: *John Moulas (Kilmarnock), Ltd., Kilmarnock.

Lancs.—Following schools for EC:—Droylsden Little Moss cty. sec.: *Moston Brick & Building Co., Ltd., Kenyon-la., Manchester 10, £132,890. Lytham St. Annes cty. sec.: *Atherton Bros., Ltd., 70, Peter-st., Blackpool, £112,108. Whitefield Higher-la. cty. sec.: *Moston Brick & Building Co., Ltd., £109,292. Leyland Earnshaw Bridge cty. sec.: *Leyland Construction Co., Ltd., Wellfield Hough-la., Leyland, £96,262. Crosby cty. sec.: *Richard Costain & Sons (Liverpool), Ltd., Barlows-la., Fazakerley, Liverpool, £93,497. Rossendale College of Further Education, Phase I: *J. Tinline, Ltd., Parker-st., Sawmills, Bury, £44,928.

¶London (Admiralty).—Particulars of contracts placed by Civil Engineer-in-Chief's Dept., Admiralty:—*Herstmonceux*: Construction of equatorial group at Royal Observatory, Charles R. Price, Kingsbury-rd., London, NW9. *Devonport*: Workshop, Staverton Builders, Ltd., Totnes, Devon. *Gibraltar*: New office block, Humphreys, Ltd., 187, Knightsbridge, London, SW7. *Yeovilton*: Extension to generator stn., A. Hoskins & Sons, Ltd., Stone Hill-st., Somerset. *Havant*: New road, etc., Warings (Contractors), Ltd., London-rd., Hilsea, Portsmouth. *RNAS, St. Merryn*: Patent Glazing, The British Challenge Glazing Co., Marshgate-la., Stratford, E15. *Yeovilton*: External and internal decorations, A. Hoskings & Sons, Ltd., West End-st., Somerset. *Fareham*: Modification and extension hot-water system, Mumford, Bailey & Preston, Ltd., 22a, Holdenhurst-rd., Bournemouth. *Portsdown*: Fire protection and alarm equipment, Mather & Platt, Ltd., 22, Great Smith-st., London, SW1.

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¶London (Air Ministry).—Contracts to value of £500 or over for week ended September 26:—

Construction of conduits, etc.: A. Schofield (Builders), Ltd., "St. Bedes," Hornsea, East Yorks. *Extension to runways and taxi tracks*: W. and C. French, Ltd., Buckhurst Hill, Essex. *Waterproofing of sheds*: Berry Wiggins & Co., Ltd., Field House, Breams-bldgs., Fetter-la., EC4. *Repairs to concrete paving*: E. Clarke & Sons, Ltd., Snow Hill, Melton Mowbray, Leicestershire.

Repairs to runways: Chittenden and Simmons, Ditton Place, Larkfield, Maidstone. *General maintenance work*: C. Young & Son, 54, King-st., Nairn; Stanley Hugh Leach, Ltd., 231, Yeading-la., Hayes, Middx. *Building work*: Beric, Ltd., Hurn Airport, Christchurch, Hants.

¶London (Air Ministry).—Contracts to the value of £500 or over for week ended September 19:—

Heating services: Young, Austen & Young, Ltd., Tavistock House (South), Tavistock-sq., London, WC1; G. N. Haden & Sons, Ltd., Albion Bldgs., 14, Canning-pl., Liverpool 1.

LCC.—The undermentioned contracts exceeding £2,500 in value have been placed by the LCC during the period August 8 to September 19:—

Interior decorative renovation at James Wolfe and Beverley prim. schs., Greenwich: William Mills & Sons, Ltd., £3,730. Erection of extension of Putney cty. sec. sch.: C. Miskin & Sons, Ltd., £314,312. Construction of bowls pavilion at Hurlingham Park: Cobby & May, Ltd., £2,864. Construction of block 3 and block 4 (part), and other work at Wellington estate extension, Bethnal Green: Sloggetts (Contractors), Ltd., £57,840. External repairs and painting at Gifford sec. sch., Islington: Kind & Co. (Builders), Ltd., £2,740. Repairs and redecorations at Cranbrook prim. and sec. sch., Bethnal Green: E. Satterthwaite, Ltd., £11,902. Construction of blocks 1-3 at Clapham Park estate (Atkins-rd. site), Wandsworth: Wates, Ltd., Norbury, £112,850. Repairs and decorations at Sebright prim. sch., Shoreditch and Finsbury: G. J. Manning (Builders), Ltd., £9,947. Construction of superstructure of block 1, Wapping estate (Bostock-st. site), Stepney: W. J. Marston & Son, Ltd., £54,317. Reinstatement of areas of Hackney Marsh: Kinman (Contractors), Ltd., £7,208. Electrical installation at Whittington prim. sch., Islington: Buchanan & Curwen, Ltd., £3,321. Construction of blocks 1 and 2 of flats and other work at Dickens estate (Jamaica-rd. site), Bermondsey: Rowley Bros., Ltd., Tottenham, £85,383.

London (Metropolitan Police).—Contracts placed by Metropolitan Police:—

External and internal redecorations and repairs at 11-23, Glasgow-rd., Plaistow: Fisher & Stringer (Builders), Ltd., £693. External painting and repairs and internal redecorations and repairs at Highbury Vale Police Station: Jas. Thomas & Sons, Ltd., £3,091. External painting and repairs at South Mimms Police Station and married quarters, 1-4, St. Albans-rd.: G. F. Ree, £515. Internal and external redecorations at Martins-ave., Bexley Heath: Luckett & Son, Ltd., £997.

¶London (MoW).—Contracts placed by MoW during week ended September 19:—

London: Victoria and Albert Museum (India Section), SW, roof repairs to galleries, A. J. Evans & Son, Ltd., 613, Harrow-rd., Kensington, W10; British Museum, WC1, copper roof over Ethnographic gallery, Fredk. Braby & Co., Ltd., 352-364, Euston-rd., London, NW1. *Dorsetshire*: Home Office Police Training College, Chantmarle, Cattistock, nr. Dorchester, alterations to stable blocks to form living quarters, Ricardo, Ltd., Fordington Green, Dorchester, Dorset.

Essex: 1 and 2, Central-par., Collier Row, Romford, adaptations to form branch post office, Charles S. Foster & Sons, Ltd., Smart's-la., Loughton, Essex; Loughton Branch Post Office, alterations, Charles S. Foster & Sons, Ltd., Smart's-la., Loughton, Essex. *Glamorganshire*: MS Brackla, Bridgend, internal and external painting, Norman Oldham, Ltd., 14a, Mundy-pl., Cardiff. *Lancashire*: M/Pensions, Norcross, Blackpool, internal decorations and cleaning, Wilfred Coop, Ltd., 94, Whitegate-dr., Blackpool. *Sussex*: Dental Estimates Board, Temple-gr., Eastbourne, stripping and retiling roofs, Paine and Betteridge, Corner House, Junction-rd., Eastbourne.

¶London (War Dept.).—Contracts placed by WD during week ended September 19:—

Armagh: Painting and decorating, George Wilson & Son, Whitehead. *Lincolnshire*: Structural steelwork, Orthostyle, Ltd., Scunthorpe. *Yorkshire*: Roof repairs, F. Shepherd & Son, Ltd., Richmond (Yorks). *Essex*: Dismantle pier and swing bridge, Samuel Williams & Co., Ltd., Dagenham, Essex. *Kent*: Painting, Geo. Jones & Son, Kensington, W8. *Sussex*: Building, Ringmer Building Works, Ltd., Ringmer, Sussex. *Wiltshire*: Roadwork, O. J. Elliott & Co., Ltd., Winterbourne, Bristol; Building, F. Rendell & Sons, Ltd., Devizes. *Hampshire*: Painting and decorating, Arnold Sharrocks, Ltd., Ash, nr. Aldershot. *Gloucestershire*: Roadwork, Constable Hart & Co., Ltd., Richmond, Surrey.

Manchester.—Following for Reg. Hospital Brd:—New twin operating theatre at Crewe Memorial: *Cooper Bros. & John Clayton, Ltd., Catherine-st.,

Macclesfield, £28,849. Hostel for male adolescent mental defectives at Mary Dendy hospital: *Frank Marsland, 7, Bullock-st., Stockport, £16,883. Alterations to wards at Clitheroe: *George Waddington, Barrow, Whalley, £5,461.

Mansfield Woodhouse.—30 houses at Coxs-la. estate, for UDC: *Direct Labour.

Northallerton.—Eight bungalows, Priory Close estate, for UDC. A. J. Hardy-King, Surveyor. Quantities by Turner and Ing, 2, Garden-st., Darlington: *Stokes and Costick, Friarage Mount, Northallerton, £9,625 7s. 5d.

Oswestry.—New attested section, Smithfield, for BS:

The Butterley Co., Ltd., Ripley, Derby ..	£21,657
W. Watkin & Co., Oswestry	20,511
E. W. Gittins & Sons, Ltd., Johnstown, nr. Wrexham	19,410
*F. W. Davies & Co., The Rhewl, Gobowen, nr. Oswestry	19,057

(Subject to Ministry approval.)

Plymouth.—91 houses at Chaucer-way, for BC: *Direct labour, £125,991.

Plymouth.—Erection of 31 houses at Crownhill North: *J. W. Spencer, £41,531.

Ryton-on-Tyne.—Erection of 50 houses at Park Field North, for UDC. Plans by S.: *Direct Labour, £62,000 (approved by MoH&LG).

Shardlow.—Erection of block of shops off Carlisle-ave., Littleover, for UDC: *Morleys Builders, Ltd., Exeter-st., Derby, £7,690.

South Shields.—The engine works of J. Readhead & Sons, Ltd., South Shields, are to be reroofed and foundation and piling work done. Architects are L. J. Couves & Partners, Carliol House, Newcastle-on-Tyne: Steelwork, *Lambhill Ironworks, Ltd., Glasgow.

Southwell (Notts).—10 bungalows and four houses at Clipstone, for RDC: *A. Eastwood & Sons, Ltd., Burns-la., Warsop.

Staffs.—Extensions to Parish Church at Streetley, for Church Council: *J. R. Deacon, Ltd., Lombard-st., Lichfield.

Wallsend.—Alterations and extensions to the works of the Thermal Syndicate Co., Ltd. Architects, L. J. Couves & Partners, Carliol House, Newcastle: *Peter Edwards, Back Causey-st., Gosforth, Newcastle-on-Tyne.

Wallsend.—Additions to research stn. for the Parsons & Marine Engineering Turbine Research and Development Association. Architects, R. T. James & Partners, 1, St. Nicholas'-bldgs., Newcastle-on-Tyne. Office block and canteen: *Holland & Hannen and Cubitts, Ltd., Howdon-on-Tyne. Machine shop: *Purdie, Lumsden & Co., Ltd., Oxford-st., Newcastle-on-Tyne.

Warrington.—32 houses at Park-rd. site, Great Sankey, for RDC: *E. Lunt & Son, Ltd., Warrington, £44,530. Five houses at Warrington-rd., Risley: *J. Aldred, Chapel-st., Leigh, £6,835.

Wood Green.—Erection of six flats on the Winkfield-rd. site: *W. Manning & Sons, Ltd., £13,862. (After reductions.)

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